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FOREIGN STUDENTS AND THEIR AMERICAN STUDENT FRIENDS.

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THE SOCIOCULTURAL INTERACTIONS AND RELATIONSHIPS AMONG FOREIGN STUDENTS AND AMERICAN STUDENTS ON THE INDIANA UNIVERSITY CAMPUS WERE STUDIED TO ASCERTAIN THEIR IMPACT ON THE NATIVE GROUP AND TO DETERMINE THE DISTINGUISHING CHARACTERISTICS OF FRIENDSHIP PATTERNS AND ASSOCIATIONS BETWEEN BOTH GROUPS. ABOUT 550 AMERICAN STUDENTS WERE SELECTED FOR THE PROJECT SAMPLE. ALL WERE CLOSE FRIENDS OF FOREIGN STUDENTS ON CAMPUS. DATA WERE OBTAINED FROM A BACKGROUND QUESTIONNAIRE, PERSONALITY AND PERSONAL PREFERENCE TESTS, SCHOOL RECORDS, AND PERSONAL INTERVIEWS. A PART OF THE SAMPLE POPULATION WAS COMPARED TO OTHER STUDENTS WHO HAD NO CLOSE FOREIGN FRIENDS. THE FOREIGN STUDENTS SUPPLIED THE INFORMATION WHICH LED TO SELECTION OF THE STUDY SAMPLE FROM WHICH OBJECTIVE INFORMATION (ORIGINS AND DEVELOPMENT OF PRESENT FRIENDSHIPS WITH FOREIGN PEOPLE) AND SUBJECTIVE INFORMATION (ATTITUDES AND PERCEPTIONS OF FOREIGN PEOPLE) WERE OBTAINED IN ADDITION TO THAT DATA DESCRIBED ABOVE. IT WAS DETERMINED THAT THE FRIENDSHIPS UNDER EXAMINATION WERE BASED UPON SIMILARITIES IN INTERESTS AND ENVIRONMENTAL PROXIMITIES RATHER THAN UPON PERSONAL OR BACKGROUND CHARACTERISTICS, AND THAT INITIAL CONTACTS BETWEEN THE TWO GROUPS AROSE FROM ACADEMIC AND OTHER INTERESTS MATCHED IN INFORMAL AND SPONTANEOUS MEETINGS. CAMPUS ACTIVITIES AND COMMUNITY ORGANIZATIONS APPEARED TO CONTRIBUTE LITTLE. (JH)

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**FOREIGN STUDENTS AND THEIR AMERICAN STUDENT FRIENDS**

**Cooperative Research Project No. 5-0806**  
**CR 2266**

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**1966**

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## ACKNOWLEDGMENTS

In a rapidly contracting world it is of the utmost importance for the colleges and universities of this country to learn how to achieve the greatest educational value and enrichment from human diversity and cultural differences. The interaction of foreign students with American students on campus in the United States is a valuable component of this educational process.

This study endeavored to define the problem of measuring the impact of this cultural interaction as well as to ascertain some of its distinguishing characteristics on a typical, co-educational, publicly-sponsored, large midwestern university.

We wish to express our sincere appreciation to the exceptional leadership given the project by Dr. Robert Shearer, who displayed the highest qualities of initiative, resourcefulness and scholarship in supervising the various stages of the study from its origin to the completion of the first draft of the final report.

We also wish to acknowledge the substantial contribution of Mrs. Douglas G. Ellison, who designed the form of the interview and was responsible for training the interviewers. Her experience, energy and competence was indispensable in securing the original data. Further we owe a special debt of gratitude to Mr. Douglas C. Harris, who followed Dr. Shearer in carrying the report through the process of final editing, reproduction, and binding. A large number of other individuals both

foreign and native contributed significantly to the study and their sympathetic and eager cooperation is acknowledged and appreciated. This study could not have been carried through to completion without their help.

Although the results reported in this study are in no way conclusive, we do hope that they will stimulate further examination of an important problem and in this way contribute towards an improved quality of educational interaction among foreign and American students in the various campuses and universities of this country.

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March, 1966



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## Introduction

Since the end of World War II the interdependence of nations and peoples of the earth has become a reality. Changing geographical boundaries and the creation of dozens of new countries have caused mutual cooperation and understanding among nations. Although many of these problems can be alleviated by direct action on the part of official representatives of nations, it is recognized that mutual interaction and communication of ordinary citizens have become vital supplements to peaceful coexistence. This mutual interaction, or cultural relationship, is defined by McMurtry as the friendship between the citizens of different countries, or a people to people friendship, that develops in ways similar to ways a friendship develops between two individuals (36:3). Efforts on the part of individuals and governments to increase the extent and effectiveness of this mutual interaction have crystalized in the development of foreign student exchange programs.

In the United States, as a direct expression of good will and intent toward the peoples of other nations, the government has implemented an educational and cultural exchange program through the Department of State (46:1). One of the most important facets of this exchange program is the exchange of scholars between the United States and other countries of the world. Due to the impetus of the Fulbright Exchange Program that started in 1946 an increasing number of foreign students and scholars have attended our colleges and universities (69:96). For example, at Indiana University there were

192 foreign students from 46 countries in 1949-50 but 756 from 73 countries in 1963-64. Throughout the same period educators increased their attention to an emphasis upon the values of international exchange and association with people from other nations and cultures. During 1963-64 over 90,000 foreign students were enrolled in our institutions of higher education and the number is expected to increase annually in the years to come (42:4). Thus, almost all colleges now have some foreign students on their campuses.

Even though these programs have expanded and greater numbers of foreign students are sojourning in our country, the complex variables involved in cross-cultural exchanges make it difficult to evaluate the total effect of these programs. Most of the research to date has concentrated on the problems of foreign students because differences in cultural values and mores among the participants, and differences in their motivations, desires, and personalities, are primary factors affecting their visits here. Other factors, however, such as the influence of the American students, and the physical environment of the campus community, are known to affect the total outcome of the exchange experience (14:105). If the true impact of the exchange programs is to be evaluated adequately, these variables must be more fully investigated.

The lack of information about the quality and extent of the interaction between foreign and American students is of particular concern to educators (14:105). Effective interaction is one of the main criteria for judging the success of the exchange experience,

yet little is known about the factors involved in foreign and American student relationships (49:285). Where the student body and the number of foreign students are small, the relationships may be close and effective; but on the other hand, they are often artificial. In the large universities, the size of the student bodies and great numbers of foreign students sometimes result in general anonymity, coldness, unawareness, and occasionally even actual rejection.

There have been numerous studies directed toward determining the effects upon foreign students of their study in the United States. According to Cormack, though, research on the effect of foreign students on American students has been wholly neglected (14:109). Therefore, the personality and behavioral changes in American students that might occur as a result of interaction with foreign students have never been identified.

The investigations that have been completed (25:26) centered on isolated attitudes and traits of American students who were friends of foreign students; but there is little research which has attempted to construct a composite view of personal characteristics which may account for a student's seeking or rejecting these friendships. Goldsen investigated the assumption that American students who seek the company of foreign are socially deviant and unable to form satisfying friendships with their own American peer groups. Her findings indicated that the American students who were friends with foreign students were actually outgoing and active in campus activities (25:32). Haller and Bray tested seven hypotheses concerning the attitudes and interests of American students named as friends by foreign students. The one hypothesis which was

accepted was that foreign students tend to like American students who are intellectually oriented.

In addition to the social and intellectual variables, more information is needed about the background characteristics and previous experiences which may encourage students to seek out people from other countries. The extent to which prior environmental situations influence interaction has not, as yet, been determined. Gillin, however, has suggested that regional cultural values exist within the United States and that people within a certain region reflect values slightly different than those of people from another region (24:107). He states, for example, that people in the Midwest tend to feel that foreigners are inferior and that they prefer isolationism to international cooperation (24:109). If Gillin's typology is correct, then would students from certain states or sections of the country be more likely to form friendships with foreign students than those from other geographical areas? Or, does a student from a large metropolitan area react differently to foreign students than one from a less populated area? Other factors, such as birthplace of parents and their socio-economic level, might also influence the extent of interaction. The question may be asked whether or not a student whose parents are foreign born feels more kinship toward foreign students than one whose parents are native born Americans.

Since more foreign students are visiting the United States for one or more years of their high school education, many American students have been exposed to a variety of experiences with people from other countries before they enter college. It would be of value

to foreign students' advisors to know if this previous experience with exchange students in high school influences the extent to which American students interact with foreign students after they enter college. Having had foreign students visit the family or home community, travel abroad, and service in the military forces are other experiences which may influence a student's reaction to friendship with foreign students. Furthermore, interest in a particular field of study, such as language or international relations, may indicate certain personality characteristics which encourage students to become acquainted with foreign students.

In addition to these background characteristics and interests, it would be of value to educators to know if some students are motivated to interact with foreign students because of certain personality traits. Do students, for instance, who are autonomous and less concerned about peer group pressure make more friends with foreign students than those who feel the need to conform to societal pressure? Or, do students who feel the need to help others tend to form friendships with foreign students more so than students who are not so altruistically motivated?

Even though these personal characteristics of individuals involved in trans-cultural interaction are important, factors inherent in the living arrangements also contribute to the quality and extent of friendships that may develop (49:63, 102-103). Therefore, situations involving foreign students in residence at American colleges and universities offer unique opportunities to test various social theories in a cross-cultural context (29:212). It may be possible, for instance, to apply theories about interracial



stereotypes and ethnic group prejudices and their relationship to environmental situations. The effects of certain living arrangements are known to be beneficial to the reduction of interracial prejudice between ethnic groups, but whether or not this is true for cross-cultural groups remains to be seen (15:592, 593). Investigation into this aspect of intergroup living would enable educators to more fully understand the problems affecting interaction between foreign and American students on our campuses.

An important value frequently assumed for having foreign students on the campuses of colleges in the United States is the broadening effect their presence and associations have upon the native students. In view of the pressures to limit non-resident enrollment in public institutions, to restrict housing and financial aid to resident students, and otherwise respond to the demands of expanding enrollments, it is important to evaluate the effects of foreign students on American students and in turn, upon American colleges.

#### Statement of Problem

The problem of this study was to analyze and describe the impact of foreign students upon those American students who have had the greatest amount of contact with them. This investigation approached this problem by analyzing the personal data characteristics, personality inventories scores, and personal interview responses of a group of 554 American students who were named as friends by foreign students at Indiana University.

The specific objectives of this investigation were as follows:

1. Identify and learn the personal and background characteristics of those American students who were named as friends by foreign students.
2. Determine the personality characteristics and needs of the named friends as reflected on the Edwards Personal Preference Schedule and the Allport-Vernon-Lindzey Study of Values.
3. Ascertain the origin and development of the relationships between foreign and American students.
4. Determine the American students' perceptions of foreign students.
5. Learn what effects the American students felt their associations with foreign students had upon them as individuals.
6. Learn what the American students felt about other Americans' attitudes toward their friendships with foreign students.
7. Determine the American students' attitudes toward financial aid for foreign students.
8. Determine the American students' opinions about foreign students' problems and difficulties.
9. In a residence center composed of foreign and American students, determine the differences between those American students named as friends by the foreign students and those American students not named as friends by foreign students.

The specific questions derived from the objectives of this study were based on the items of data available from three main



sources of information: personal data files, personality inventories scores, and the interview data.

The personal data items obtained from the files in the Dean of Students Office included the following: age, sex, marital status, campus housing unit, class standing, field of study, home state, size of home town, participation in activities, military service experience, birthplaces of parents, educational levels of parents, and occupations of parents.

The two personality inventories administered to the students in the named and not named populations were the Edwards Personal Preference Schedule and the Allport-Vernon-Lindzey Study of Values. The EPPS contains 15 personality variables which are as follows: (19:5)

- |                 |                     |
|-----------------|---------------------|
| 1. Achievement  | 9. Dominance        |
| 2. Deference    | 10. Abasement       |
| 3. Order        | 11. Nurturance      |
| 4. Exhibition   | 12. Change          |
| 5. Autonomy     | 13. Endurance       |
| 6. Affiliation  | 14. Heterosexuality |
| 7. Intraception | 15. Aggression      |
| 8. Succorance   |                     |

The Study of Values contains six scales of interests or motives in personality (3:3). These scales are: Theoretical, Economic, Aesthetic, Social, Political, and Religious.

The personal interview questions were concerned with six areas of the student's friendships with foreign students. These areas are: (a) the origin and development of the cross-cultural friendships, (b) the American students' perceptions of foreign students, (c) the influence of the foreign students on the American students, (d) the American students' perceptions of other Americans' attitudes, (e) attitudes toward financial aid for foreign students,

and (f) opinions about foreign students' housing and personal difficulties.

The specific questions derived from the main objectives of this investigation were as follows:

1. What were the ages of the students who were named as friends by foreign students?
2. How many males and how many females were named as friends by the foreign students?
3. What was the marital status of the students named friends?
4. What was the geographical distribution of the named friends in terms of their home states?
5. What were the populations of the home towns of the named friends?
6. How many of the named friends participated in high school and college activities?
7. How many of the named friends served in the military services?
8. What were the major fields of study of the named friends?
9. What were the national birthplaces (U.S. or foreign) of the fathers and mothers of the named friends?
10. What were the educational levels of the fathers and mothers of the named friends?
11. What were the occupational levels of the fathers and mothers of the named friends?
12. What were the mean raw scores of the male and female named friends on each variable of the EPPS?
13. What were the mean raw scores for the male and female named friends on each variable of the Study of Values Inventory?
14. Where did the named friends first meet their foreign student friends?
15. Where did the named friends usually get together with their foreign student friends?

16. What interests did the named friends share in common with their foreign student friends?
17. How many of the named friends made friends with other foreign students? (in addition to their first friend mentioned)
18. What were the national origins (in terms of world regions) of these other foreign student friends of the named students?
19. Did the named students know foreign people before they came to Indiana University?
20. Where did the named friends know these other foreign people before coming to Indiana University?
21. Did the named friends converse with foreign students in any language other than English?
22. What languages did the named friends use in conversing with foreign students?
23. How did the named friends think foreign students differed from American students?
24. What did the named friends think foreign students thought of Americans?
25. What were the named friends' beliefs about how well foreign students get to know Americans?
26. What new interests had the named friends developed as a result of having known foreign students?
27. Have named friends modified their attitudes on any question at home or abroad as a result of having known foreign students?
28. Have the named friends changed any of their plans for the future as a result of having known foreign students?
29. What did the named friends think about how other Americans viewed their friendships with foreign students?
30. What did the named friends think about how other Americans viewed a dating relationship with foreign students?
31. What were the attitudes of the named friends toward federal government aid to foreign students?
32. What were the attitudes of the named friends toward Indiana University giving financial aid to foreign students?

33. What did the named friends think of the over-all arrangements for the foreign students at Indiana University?
34. What kinds of difficulties did the named friends think foreign students have at Indiana University?
35. What did the named friends think could be done about foreign students' difficulties?

### Purpose of Study

It has been shown that foreign student exchange programs are effective in creating greater mutual understanding and in reducing stereotyped images between the peoples of the United States and the peoples from foreign cultures (46:2). Friendships between foreign and American students is an important factor between these two groups. As yet, however, little is known about the personal and environmental factors involved in cross-cultural friendships. Therefore, the identification of these factors is the first step in the formulation of sound criteria for adequately evaluating the scope and intensity of these relationships. It was hoped that the findings of this study would provide some basis for determining the factors that affect inter-cultural relationships between foreign and American students.

### Significance of Problem

According to Gibson, one of the most important functions of higher education in the United States has been its service to the community, state, and nation (22:114). Brubacher also states that its positive dedication to the service of a pluralistic, democratic society has distinguished American higher education from other modern conceptions of universities (10:378).

In recent years, however, new and faster means of travel and communication have brought the peoples of the United States and other countries of the world into close personal contact with one another. Simultaneously, world economic, social, and political changes have brought new forces to bear upon the goals of American higher education. Universities must now broaden their role to meet these demands of a changing world (63:10). This magnified role of the colleges and universities in our society indicates that they must take the lead in promoting world-minded attitudes--service to the American community must be expanded to include service to the world community.

In order to foster this international perspective, universities must provide opportunities for mutual association between American students and the peoples from diverse cultures. Therefore, foreign student exchange programs are the most concrete means by which educational institutions can promote worldmindedness.

Cormack maintains that most American educational institutions today do participate in some type of foreign student exchange program (14:9). In view of the increased enrollments and financial problems facing higher education, however, the positive value of admitting larger numbers of foreign students to our campuses might be challenged. Keezer has estimated that by 1970 student enrollment in American colleges and universities will reach 6 million and the cost of annual expenditures will be about 10 billion dollars (31:2). If these projections are valid, then lack of adequate housing facilities, teaching staff, and classrooms, may cause many institutions to limit their enrollments. Consequently, they may be



forced to re-evaluate the advantages to be gained by the admission of foreign students.

Knowledge about the extent to which satisfying friendships with foreign students help American students gain broader international perspectives and worldminded attitudes will help educational administrators to formulate sounder educational policies. Information concerning the characteristics of American students who make friends with foreign students, and the types of activities and environmental influences that encourage interaction, may help foreign student advisers to plan more effective foreign student programs.

#### Definition of Terms

The following terms were defined for use in this study:

1. "Named Population": The American students born in the United States and enrolled at the Bloomington Campus of Indiana University during the academic year of 1963-64 and who were named as friends by foreign students on the foreign student questionnaire. The terms "named group" and "named students" were used interchangeably with the term "named population" throughout the study.
2. "Foreign Students": Students enrolled at Indiana University during the academic year of 1963-64 but who were citizens of a country other than the United States.
3. "Not Named Population": The American students born in the United States and living in the Graduate Residence Center during the 1963-64 academic year but who were not named as friends on the foreign student questionnaire. The terms "not named group" and "not named students" were used interchangeably with the term "not named population" throughout the study.

#### Delimitations

The populations were composed of foreign and American students who were enrolled at the Bloomington campus of Indiana University during the 1963-64 academic year.

### Limitations

It should be recognized that the main criterion for the establishment of the named population was the fact that these students were named as close friends on the foreign student questionnaire. This does not necessarily indicate that these named students were the only close friends of the foreign students on campus; it could be assumed that other close American student friends of foreign students were not named on the questionnaire.

The sole criterion for the establishment of the not named group was the fact that these students were not named as friends on the foreign student questionnaire. This did not necessarily indicate that members of this group were not, or had not been, friends of foreign students.

As in any analysis of interpersonal or social relationships it was difficult, if not wholly impossible, to determine just what forces were operating to cause friendship to develop between a foreign and American student. Therefore, it was assumed that in an undetermined number of cases the initial contacts and subsequent interaction between foreign and American students were just the same as that between any two individuals, regardless of the fact that one of them was a foreign student.

Because of the manner in which the interviews were conducted, the responses were recorded on a checklist and then enlarged upon by the interviewers after the interviews were completed. It was recognized that the ability of the individual interviewers to accurately interpret the data obtained in the interviews may have



been a possible limitation. Therefore, several training sessions were held in order to reduce the need for subjective judgment in recording responses on the interview guide.

## Chapter II

### REVIEW OF RELATED LITERATURE

#### Types of Studies in Cross-Cultural Research

Investigations related to this study span a wide range of literature in the behavioral sciences. Therefore, the studies related to foreign and American student interaction have been categorized as follows: (a) A summary of the reviews and evaluations of programs and research projects, (b) studies on the characteristics and attitudes of American students who are friends with foreign students, (c) studies on the attitudes and characteristics of foreign students; and also environmental factors related to interaction, and (d) studies on the general sociological and psychological theories related to cross-cultural interaction.

#### Evaluational Studies in Cross-Cultural Research

A survey of the literature pertaining to reviews of cross-cultural research pointed up the complexity and scope of the variables involved in foreign student exchange programs. The task of attempting to investigate these diverse factors has been clarified to some extent, however, by Jacobson et al. (29:205-223) who suggest that there are three basic approaches to cross-cultural studies. These three approaches include: (a) studies of the "pictures" that are held by the people of one culture about those of another culture, (b) studies related to the changes or modifications that occur in the people of one culture when they are

exposed to the people of another culture, and (c) studies pertaining to the types of reactions that occur in people as a result of the diffusion and assimilation of culturally foreign ideas and techniques.

The evaluation of foreign student exchange programs in light of the accomplishment of their stated objectives was more specifically denoted by Smith (56:387-397) who differentiated between the goals of research and the objectives of evaluation. Smith stressed that each of these techniques had implications for exchange programs, but that it was of paramount importance to determine the concrete program objectives first and then conduct research in relation to these objectives (56).

Similar viewpoints concerning the efficacy of concrete objectives were expressed by Wilson and Bonilla (68:469-479) in their review of the evaluational studies that had been completed on the exchange of person programs sponsored by the International Institute for Education. These authors also described the methods and techniques used to evaluate these programs and enumerated areas of impact and influence that had been neglected in most of the investigations(68).

The difficulties and problems that are encountered in cross-cultural research were made explicit by Hudson et al. (28:5-19) in their report of a massive five year study on Arab and American young people. In attempting to measure the variables relating to family relations, personality, and attitudes, in a cross-cultural context, the authors struggled with numerous problems of research design, sampling, cultural values, and language difficulties (28:14).

Other investigators (6:54) have outlined patterns and resumes of completed research in attempts to collate the efforts of various groups and organizations, and to point the way toward more efficient and methodical investigations (6:3-6; 57:56-68). Cook and Selltiz (13:51-58), however, have analyzed previous research from a different perspective. In an attempt to relate the findings of prior research done on ethnic groups within the United States to the possible implications these might have for understanding and predicting the outcomes of cross-cultural contacts, the investigators extracted three basic variables for further study. These variables are: (a) the qualities of the contact situation, (b) the attributes of the persons involved in the contact situation, and (c) the outcomes of the situations in terms of attitudes and behaviors. In addition to these major variables the investigators defined critical terms and offered explicit suggestions for isolating various factors within the contact situation. Furthermore, factors related to attitude formation and change were delineated and comparisons were made between the similarities and differences of single and cross-cultural interaction situations. Specifically, it was noted that initial attitudes and certain aspects of personality structure may predispose some individuals to hostile reactions to members of an out-group. In investigations involving cross-cultural groups then, an important factor to be considered is the extent to which members of one culture differ from the commonly held unfavorable stereotypes of another; and in what ways are they seen to resemble one another in background characteristics, looks, and interests (13:51-58).

### Studies of American Students

Investigations involving the attitudes and values of American students may be more meaningful if viewed from the perspective of some commonly held American cultural values. A prominent American anthropologist, Cora DuBois, (17:1232-1239) asserted that Americans have three major cultural values. These are: (a) material well-being, (b) conformity, and (c) an approach to life that values effort with an optimistic outlook. DuBois also saw a special value being placed upon work in the American society; and to people in other countries, Americans give the impression of being active, energetic, and youthful. Furthermore, she stated that great value is placed upon conformity and similarity rather than uniqueness (17:1232-1239).

In a more specific view, Gillin (24:107-113) denoted the dominant values of the American culture by suggesting a list of 17 traits that reflect national standards. Personal effort, optimism, and a pragmatic approach to the affairs of life were among those stressed as dominant American values. By going a step further, Gillin stated that certain regional areas of the country reflect slightly different values from other regions and that each region varies to some extent from the national norm. People in the Northeast, for instance, tend toward international-mindedness whereas the people of the Middle States tend to distrust foreigners and value political isolationism. Also, natives of the Southeast place a high value on kinship and the Protestant morality ethic, while in the Far West family ties are weak and little value is placed upon conformity (24:107-113).

If the assertions of these two authorities, DuBois and Gillin, can be accepted as accurately reflecting the typical values of American culture, then they may be used as a cultural context for more adequately evaluating the investigations of foreign and American student interaction.

Two main studies have been completed pertaining to the attitudes and personality characteristics of American students who were friends with foreign students.

In a study done on the Cornell University campus, Goldsen et al. (25:26-32) tried to determine what personality variables caused some American students to interact with foreign students and what variables in other students deterred the development of interaction. A random sample of 588 undergraduate and graduate students was surveyed by telephone and on the basis of their responses to three questions the students were ranked on an Interaction Scale. Subsamples were chosen from among the highest and lowest scorers on the scale and these students were interviewed concerning the origin, development, and quality of their contacts with foreign students. The investigators concluded that both personality characteristics and environmental factors influenced the development of meaningful social relations. The American students who did interact with foreign students were found to be those who were socially active on campus and generally the out-going, friendly types. Also, there was opportunity for interaction because of being in close environmental proximity to foreign students. Furthermore, these students were characterized as being less critical and dissatisfied with the political issues and social ideologies of the American culture (25:26-32).



Haller and Bray conducted a study dealing with the relationship of certain attitudes of Michigan State University students to the degree which the students, as individuals, were liked by Latin American students. Seven hypotheses concerning various attitudes of American students were tested. The hypotheses stated that foreign students liked better those American students who: (a) valued a few close friendships rather than many casual friendships, (b) were internationally oriented rather than nationalistic, (c) were favorably inclined toward foreign students, (d) were highly interested in intellectual activities, (e) were tolerant of the beliefs and ideas of others, (f) were not prejudiced towards racial groups, and (g) were knowledgeable about foreign countries. The sample of American students to be interviewed was obtained by asking 20 Latin American students to name 6 American students whom they knew. These 6 students were further differentiated into three groups: (a) two who were well known and well liked, (b) two who were well known but not selected as being well liked, and (c) two who were known but not named as being well known or well liked. One person named by each foreign student in the first and third categories was selected for further study; these students were given a 31-item Likert type questionnaire to determine their attitudes toward the seven variables. The results of this study offered no support for six of the hypotheses but did support the hypothesis that foreign students tend to like American students who are intellectually oriented (26:217-221). While this study did help to fill in the gaps in trans-cultural research, its findings were limited. The small sample of foreign students

representing one cultural area placed limitations on the extent to which the findings may be generalized to other campuses and student populations.

### Studies of Foreign Students

Studies concentrating on foreign students enrolled in American colleges and universities may be generally divided into three main areas. These are: (a) studies pertaining to the problems and difficulties of foreign students, (b) studies focusing on the attitudes and personality characteristics of foreign students, and the environmental factors involved in each situation, and (c) studies pertaining to the changes that occur in foreign students over a long or short period of time as a result of their sojourn experience. Although these categories may serve as a convenient means of interpreting data, it should be understood that their division is arbitrary and much overlapping occurs because of the scope and design of certain studies.

Another important consideration concerning investigations of foreign students was pointed out by Smith (55:231-241). Smith maintained that stereotypes of foreign students may be misleading because their problems are to a great extent "student problems" (55:232). He also stated that barriers to communication and conflicting value structures were the primary causes of their adjustment problems. Mutual understanding between foreign and American students, he asserted, would be achieved with great difficulty and only over a long period of time because it had to be based upon insight into one another's culture (55:232-234).

Problems and Difficulties of Foreign Students. The results of three different investigations (20; 43; 35) have shown that certain basic factors were related to the problems of foreign students. Among the most consistent variables affecting foreign student adjustment were country of origin, academic status, and interpersonal relations. According to the findings of these investigations many of the difficulties encountered by foreign students could be alleviated by: (a) more counseling, (b) more orientation, and (c) better housing accommodations (20:25-30; 43:787-792; 35:240-254).

Kiell (32:188-194) reported the results of a questionnaire survey of 100 Indian students who were studying at various colleges in the United States. In his investigation Kiell found that the initial attitude of 89 per cent of these students was enthusiastic and favorable towards the United States; but after living here from 4 to 40 months, only 22 per cent were still favorable toward America. Various reasons for this change were given and recommendations were suggested for improving the students' experience. Kiell stated that a foreign student's adjustment was often dependent upon his developing friendships with Americans and participating in a satisfactory social life. He recommended that university officials supplement the mere accommodation of foreign students with a well-rounded advisory program that would help promote international friendships and mutual understanding between the foreign students and the American students. Furthermore, he suggested that foreign student advisers play a more concrete role in fostering these programs and that a more diversified and active orientation be provided for all foreign students (32:188-194).

In another study, questionnaire responses of 133 foreign students from 34 countries were studied by Olsen and Kunhart (41:277-280) to determine what these students liked most and disliked most about their experiences on 5 California campuses. Three major aspects of college life were mentioned by the students. These were: (a) human relations, (b) campuses and physical facilities, and (c) academic programs. Of these three areas the one mentioned the greatest number of times was human relations. Out of the 168 responses to this category, 126 were mentioned as being satisfactory experiences and 42 were described as unsatisfactory contacts. Physical properties received the second highest number of responses, and academic programs received the third highest number of responses; again, the majority of responses for both of these categories was favorable. As a result of the negative responses in all categories, however, the investigators stressed that much could be done to improve foreign students' adjustment to American college life. The authors recommended that the opportunities for meeting and associating with American students be increased, that adequate housing facilities be provided, and that specialized counseling be made available for foreign students (41:277-280).

Attitudinal and Environmental Factors Related to Foreign Students' Adjustment. In an attempt to determine what relevant variables were related to the successful outcome of foreign students' visits to the United States, Sewell and Davidsen (51:9-19) interviewed 40 Scandinavian students at the University of Wisconsin. Besides the data gathered in personal interviews, additional information

was obtained from questionnaires, official records, and personal ratings. By combining numerous variables into specific categories the investigators formulated an "Index of Contact" that indicated the extent to which students were in contact with American students. The findings showed that the student who had a high score on this Index tended (a) to be less foreign looking, (b) to have a good command of English, (c) to have a high socio-economic status at home, (d) to have had more prior contact with Americans, and (e) was more likely to be in the liberal arts rather than the physical or biological sciences. A similar scale called the "Index of Affect" indicated that many of these same variables also tended to exert a strong influence on the degree of favorable or unfavorable attitudes that the students held toward various aspects of American life. The "Index of Affect" also revealed that the students' over-all attitudes tended to follow a definite U-shaped curve. Students' attitudes tended to be favorable in the beginning of their stay; but become less favorable near the midpoint, and then become more favorable again toward the end of their visit. One of the most important factors which influenced the rate at which students traversed this cycle was the extent and intimacy of their contacts with Americans. The authors concluded that many variables were related to the favorable adjustment of foreign students, but that contact and communication were necessary preconditions for a successful sojourn (51:9-19).

The relationship of national status as a factor in the over-all adjustment of foreign students in the United States was investigated by Morris (39). Morris differentiated three



types of status: (a) subjective--that which a student thinks he has, (b) accorded--that which is actually given to the student by other significant persons, and (c) objective--that which is given to the student by an objective, detached observer. These status variables were related to various indices of adjustment and also to background factors such as race, language, and nationality. At the UCLA campus 318 foreign students were asked to complete a written questionnaire in the presence of an interviewer who helped to interpret the questions to them. The results of this study showed that the chances for close personal relationships between foreign and American students were reduced if the foreign students perceived that their countries were being held in low esteem by the American students; but that this perceived low placement did not affect the more casual contacts or cause the foreign students to be dissatisfied during their stay here. Also, subjective and objective national status did not appear to affect the interaction between foreign and American students as much as communication skills did. Therefore, in general, the investigator concluded that individual characteristics, such as language and previous experiences, and the amount of contact with Americans was related to satisfaction with cross-cultural experience more so that the factor of national status (39:215).

Selltiz et al. (49) reported on two concurrent studies that were designed to assess the factors involved in social relations between foreign students and American students. More specifically, they investigated the factors, especially the



environmental factors, that affected and encouraged social interaction between the two groups and the effect of these associations upon the foreign students' attitudes toward the American people and America; and, in the second study they sought to determine how effectively the planned orientation programs assisted foreign students to adjust more easily to their new situations.

In an effort to investigate all the possible differences that might result from environmental conditions the investigators selected three different types of institutional settings: a small college in a small town; a large university in a small town; and a large university in a metropolitan area. Thirty-four institutions representative of the three types were chosen for the studies. In the first study 348 male foreign students were interviewed; and 150 male foreign students who had attended an orientation program were matched against 150 students who had not attended an orientation program for the population of the second study. Students in both studies were interviewed once during the fall semester and once during the spring semester. During each personal interview the foreign student was supplied with a written copy of the questions so that he would have visual as well as verbal understanding of the questions being asked.

The results of these two studies showed that several factors influenced the quantity of interaction between foreign and American students. Personal characteristics of the individuals, environmental opportunities, and orientation all influenced to some extent the development of social interaction. Of the personal characteristics examined, the students' national-cultural background was

the strongest and most consistent influence on the extent of interaction. Environmental opportunities also contributed in varying degrees depending upon the type of institutional setting and the living arrangements provided. Small colleges offered the most situations and opportunities for extended and intimate association, and metropolitan universities offered the least. Also, the most interaction with American students occurred at small colleges and the least occurred at the large city schools. Therefore, the investigators concluded that the difference in opportunities, both in campus setting and in living arrangements provided at each school, accounted for the differences in actual occurrence of interaction (49).

Although the findings of these two studies were of vast import in themselves, the significance of the results was enhanced by two other considerations. First of all, the wide range and sample of institutions used in the studies was more diversified and larger than that of any other investigation. Secondly, the definition of terms used to clarify the types of interaction was more succinct and amenable to measurement than any others yet offered in this area of research. The term "interaction-potential", used to define the physical proximity and opportunity for personal contact, offers researchers a valuable tool for reproducing and measuring similar investigations.

Attitudinal and Personality Changes in Foreign Students. The impact of a special training program on three different groups of Germans who visited the University of Michigan campus during 1949 and 1951 was investigated by Watson and Lippitt (66). Most of these visitors were in their mid-twenties and the group size ranged from 7 to 12 persons. Staff members of the Research Center for Group Dynamics conducted interviews with each member of the groups. Each person was interviewed once when he arrived, at his departure, and then again 6 months after his return to Germany. In addition to the interviews, questionnaires, records, and projective devices were used to determine what attitudes the Germans brought with them and how these attitudes changed as a result of the training program. The first group visited in the United States for 12 months and each of the last two groups stayed for a period of six months. The findings of this investigation showed that the Germans were generally more authoritarian upon their arrival than a comparable group of Americans; but they became more cosmopolitan and democratic in their behavior over a period of time. The strong nationalistic feelings that were evident in the beginning shaded into a more international outlook and perspective. These visitors also began to exhibit more dynamic feelings toward Germany and expressed views that Germany could influence her fate in the world community by solving her own problems more independently. The investigators also offered recommendations for improving the cross-cultural learning process and the training program for these visitors (66).

In a more complex study of personality variables, Bennett et al. (5) investigated the backgrounds, social roles, and attitudes of 23 Japanese students who were studying at a mid-western university. In addition to data gathered in personal interviews that were conducted over a period of a year, information was obtained from tests, observations, and records. As a second major aspect of this study interviews were conducted concurrently in Japan with 50 Japanese who had previously studied in the United States. The central problem of this investigation was to determine the influence of national identity and personal self-concept in relation to cross-cultural education. The investigators concluded from their findings that persons tend to equate their national and individual identities, and this merger provided one of the major problems in intercultural relations(5)

In another attempt to assess the long range consequences of study abroad, the Useems conducted a life history investigation of a group of 110 Indian nationals (64). Their main concern was to determine the effect of foreign study on each person in terms of what the results were for the person, for his society, and for cross-cultural relations. The information on each student was obtained through personal interviews with each individual in India and with persons who were closely associated with him there. The findings of this study showed that almost all of the students rated their experiences as being beneficial to their character and outlook. They exhibited more self-confidence and autonomous behavior as a result of having studied in another country. There was also evidence that these students were less ethnocentric and intolerant; they were more conscious of the equalitarian way of

relating to other people and also showed a moderate gain in international understanding and outlook. The authors concluded that over a period of time mutual understanding between nations of the world will increase because they are becoming increasingly dependent upon one another. Students who experience life in foreign countries will have a favorable influence upon this interdependence even though their contributions, in terms of numbers, may be small (64).

Conclusions similar to the Useems' were reported by Reigal (44:319-327) after his investigation to determine the long range effects of sponsored sojourns on the foreign nationals and their countries. Reports from Belgian returnees indicated that their immediate reaction to the exchange experience was enthusiastic and productive of favorable attitudes and responses. With the passage of time, however, the enthusiasm faded and was replaced with a warm friendliness (44:319-327).

#### General Sociological and Psychological Theories Applied to Cross-Cultural Research

In considering the complex personality variables that influence an individual to seek or reject friendships with persons from other cultures, two distinct tendencies stand out. These tendencies seem to be a part of an individual's value structure and/or his personal philosophy of life. Their origin, however, may result from the internalization of parental or authority figure values and outlooks, as well as from the conscious cognitive processes utilized by the individual. These two tendencies or predispositions are (a) the tendency to constrict one's



thinking to a narrow, ethnocentric view of life and society, and (b) the tendency to attach an unfavorable stereotype to people who are different from one's self.

Studies pertaining to the characteristics of international and nationalistic minded persons, and studies dealing with stereotyping tendencies of individuals offer some possible explanations for the differences between the personality characteristics of individuals who seek cross-cultural contacts and those who do not.

Since the term international mindedness may lend itself to a distorted definition of the humanitarian concept it is intended to convey, Sampson and Smith (48:99-106) defined the two terms "international mindedness" and "worldmindedness". They defined the term "international mindedness" to mean an attribute that reflects a factual knowledge and interest in international affairs; and "worldmindedness" to mean a value orientation that denotes an individual who sees the problems of humanity from a world view point--mankind is his primary reference group, rather than a national group (48:99). In order to confirm their definition the investigators developed a 32-item Likert type scale, "The Worldmindedness Scale", that measured eight dimensions of the worldminded frame of reference. The scale was validated and then administered to 223 high school and college students in the northeastern part of the United States. The mean score obtained by this group indicated that the respondents were "mildly" in favor of the worldminded value orientation. Other validity and reliability studies indicated that the Scale had the capacity to distinguish between attitudes of subjects in groups previously known to differ in worldmindedness (48:99-106).



In another study the "Worldmindedness Scale" developed by Sampson and Smith was used by Garrison (21:147-153) to investigate the attitudes of students at the University of Georgia. Average scores on the Scale were compared with class standing, state of residence, religious affiliation, and father's occupation. Garrison's findings showed that scores on the Scale tended to increase from the freshman to the senior year in college; and students from the South and Southeast scored lower on the Scale than did students who had lived outside of the South for varying periods of time. Furthermore, Baptists and related religious groups of students scored lowest of all religious groups; and students from an agricultural background scored lowest, while those from a professional background scored highest on the Scale.

Another group of secondary school and college students was investigated by Smith (53:469-477) to determine possible attitude changes that might have occurred as a result of their having traveled in Europe. As one aspect of this study Smith administered Sampson and Smith's Worldmindedness Scale and also various items from three other personality scales. His data reflected two distinct typologies of individuals--the exceptionally worldminded and the exceptionally nationalistic individuals. The exceptionally worldminded individuals were more liberal in political views, much less authoritarian, and considerably more favorable toward democratic ideology than the exceptionally nationalistic individuals. In personality characteristics the highly worldminded persons were less masculine and ascendent, more emotionally dependent and impulsive, and more inclined toward intropection than the highly

nationalistic individuals. Highly worldminded individuals also tended to be more easy going and carefree, and more oriented toward interpersonal relations than the nationalistic group. Smith indicated that these two typologies rather closely paralleled the extremely non-authoritarian and authoritarian personalities described by Adorno et al. in their book the "Authoritarian Personality" (53:469-477).

In another effort to determine the personality characteristics of worldminded individuals Lentz (34:207-214) analyzed the data gathered in two studies--one done in 1936 and one done in 1946. In both studies two contrasting groups were selected based upon the answers to two key questions bearing on worldmindedness. The 1936 total population consisted of 763 college students who were given a 3000 item inventory known as the "Youth Expressionnaire". On the basis of their responses to the two key items on worldmindedness two criterion groups were selected for comparison. In the 1946 study 514 high school seniors and college students were given a modified version of the inventory used in the 1936 study. Two contrasting groups were again chosen on the basis of their responses to the two key worldminded items. The results of both studies indicated that the worldminded individuals, when compared to the nationalistic minded individuals, were: (a) less prejudiced against people of other nations, (b) less antagonistic toward ethnic and racial groups, (c) more enthusiastic about liberal and radical views, and (d) more sympathetic towards persons in unfortunate circumstances. In summary, Lentz concluded that the world

citizen tends to be more democratic, tolerant, social-minded, and generally more liberal in his outlook than the nationalistic type person (34:207-214).

The "Worldminded Scale" was again used in an investigation conducted by Smith and Rosen (54:170-183) to determine the extent to which the personality traits of the "nationalistic" type person coincided with the picture of the authoritarian person described by Adorno et al. The Scale was administered to 193 young, middle class adults who were enrolled in several metropolitan New York universities. The top 20 scorers and the lowest 20 scorers, as determined by their scores on the Worldminded Scale, were selected for further study. These two groups were then given a 22-item form of the F Scale and were also asked additional questions during a personal interview. Results showed that on 11 of the 12 variables measured the High-World:Low F scores and the Low-World:High F scores were in the predicted direction. The H-W scorers were characterized as valuing experiences which tended to stimulate personal growth and rejecting those that reflected narrow-mindedness; and they valued such traits as love, affiliation and good interpersonal relations. Individuality and independence were also valued by the H-W scorers and they were much less prone to think in terms of unqualified stereotypes than the L-W scorers were. The L-W scorers reflected narrow-minded traits and tended to show attitudes of rejection toward others. These people also responded in terms of unqualified stereotypes and did not tend to specify equality as a desirable quality or prejudice as an undesirable quality. The

investigators concluded that there seemed to be definite similarities between the authoritarian person described by Adorno et al. and the "nationalistic" type person that is differentiated on the "Worldminded Scale" (54:170-183).

Factors which may encourage individuals to think in terms of stereotypes were examined by Katz and Braly (30:280-290) who conducted a study in 1932 to emphasize the influence of public as well as private attitudes on the formation of racial and national group stereotypes. One hundred Princeton students were asked to choose from a list of 84 adjectives the five traits which they thought were most characteristic of ten racial and national groups. Their findings showed that the students held definite stereotyped pictures of Negroes, Germans, and Jews. On the basis of the high agreement by over 50 per cent of the respondents the investigators concluded that students assigned characteristics to various groups by drawing upon knowledge gained from both personal and public sources; and that the definiteness of the stereotyped picture does not necessarily mean that overt prejudice would be exhibited against those particular groups (30:280-290).

By repeating the 1932 study of Katz and Braly, Gilbert (21:245-254) attempted to determine the degree of persistence and change in stereotypes over a long period of time. In 1950 Gilbert administered the same 84 word list to 333 students at Princeton that Katz and Braly had used in their study. A comparison of the 1950 results with the 1932 findings showed that there was some evidence of persistence of ethnic stereotypes but that there was some evidence of persistence of ethnic stereotypes

but that there was more impressive evidence of resistance and fading out of stereotypes. Even though the same characteristics were checked for Negroes and Jews in both studies, it was significant that they were checked by a smaller proportion of students. The investigator concluded that the present generation of students was more reluctant to characterize and make broad generalizations about ethnic groups. Furthermore, the present day students seemed to base their feelings more on cultural realities rather than on parental prejudices or fictitious images (23:245-254).

The influence of different types of information used in the formation of stereotypes or images was also investigated by Bjerstedt (9:24-29) in two separate studies. In the first study Bjerstedt conducted an investigation in five International Children's Camps (with about 200 children representing 16 different nations) to determine whether information gained through close association helped increase the amount of personal contact between children of different nationalities as the camp progressed; and to determine if there were any discernable changes in the children's general attitudes towards cross-cultural friendships. The methods used to obtain data included personal interviews, observations of informal contacts, and various projective techniques. The investigator concluded from his findings that the children tended to have less preference for friends of their own nationality or language at the end of camp than they did at the beginning; and that the camp experience was a positive influence in encouraging cross-cultural friendships. Bjerstedt also concluded that direct sources of information, such as may be found in close personal contact, did



play an important role in the formation of international images, and therefore these kinds of national images were amenable to educational influences (9:24-29).

In a second study (9:24-29) Bjerstedt investigated the role of non-informational determinants in the formation of international orientations. This investigation consisted of two sub-studies. In the first study a group of 30 Swedish students was divided into two groups on the basis of their responses to a sentence completion blank. One group was comprised of students who expressed negative statements about a foreign nationality and the second group had students who did not express any negative statements. The main question in this study was to determine if individuals who displayed simplifying and rejecting behavior in a rather specific instance, such as the sentence completion, would also show similar behavior in other situations when the task was to describe conflicting data. By testing the subjects' treatment of conflicting data, insufficient data, suggestive questions, and conforming pressures, Bjerstedt concluded that individuals with more negative nationality stereotypes tended to favor more negative person descriptions on the basis of conflicting data, more definite descriptions on the basis of insufficient data, and were more easily influenced by both the experimenter and conformity pressures (9:24-29).

In order to confirm these results, a second study was conducted in which 289 male Swedish university students were given a series of statements to determine their attitudes toward international cooperation (anti-isolationism). The two extreme groups--highs and lows in scores on international cooperation--were given



a Swedish version of the Edwards Personal Preference Schedule. The findings showed that the "lows" had higher values on the "aggression", "order", and "deference" scales, but lower values on the "intraception" scale. On the basis of these findings, Bjerstedt concluded that the individual tendencies toward over-simplified and negatively biased reactions were similar to those found in the first study among subjects with negative personality stereotypes (9:24-29).

The prevalence of the stereotyping tendency as a possible causal factor in international tensions was investigated by Buchanan and Cantril (11) for UNESCO "Tensions Project". This study, entitled "How Nations See Each Other", utilized the questionnaire survey method in nine countries in an attempt to determine the type and extent of the ideas which the people of one country have about their own people and the people of four other countries. By the use of a list of 12 descriptive words almost 1000 persons from each of the five countries were asked to characterize their own countrymen and the people of the other countries. The findings showed that there was a strong tendency of the people interviewed to ascribe certain characteristics, or stereotypes, to the people of other countries. These stereotypes, however, were not always negative and the investigators indicated that a prevalence of complimentary terms in a national stereotype was a good index of friendliness between the peoples of different countries (11).

In a 1956-57 follow-up of the Buchanan and Cantril study on stereotypes, Reigrotski and Anderson (45:515-528) examined the national stereotypes of the Germans and French as held by themselves

and other peoples. A total of 6,126 people were interviewed by questionnaire in Belgium, France, Germany, and Holland. The same list of 12 descriptive words that was used in the 1948 Study was used to determine the stereotypes of each group toward their own people and toward the peoples of the other nations. In addition, each group was asked to describe all groups in their own words, and to indicate which of the four groups they considered: (a) easiest, and (b) most difficult, to get along with. The findings showed that the Germans were seen as hardworking, self-disciplined, and practical; but they were also domineering in their relations with others and often times brutal. The German people themselves confirmed most of the positive labels but rejected the morally negative ones almost completely. The French were seen by others as friendly, easy-going, and light-hearted; but they were also impulsive and disorderly. In their own eyes the French accepted the positive terms and also most of the negative ones. The age, sex, marital status, and other personality characteristics of the respondents did not significantly alter the trends of any of the groups in their expressed attitudes toward other peoples. A more important conclusion, to the investigators, than the identification of stereotypes, however, was support for the idea that education and foreign contact and acquaintance tend to modify stereotypes. In other words, contact with people of other countries helped to increase the favorable opinion held by individuals toward the people of the country with which they had contact (45:515-528).

### Summary of Studies in Cross-Cultural Research

A survey of the literature on cross-cultural research pointed up the complexity and scope of the variables involved in evaluating foreign student exchange programs. Most of this previous research, however, was concentrated in three main areas. These areas were: (a) studies on the characteristics and attitudes of American students who are friends with foreign students, (b) studies on the attitudes and characteristics of foreign students, and also the environmental factors related to interaction, and (c) studies on the general sociological and psychological theories related to cross-cultural interaction.

Two major studies delineated certain personality characteristics of American students who were friends of foreign students (25:26). Goldsen found that the American students who interacted with foreign students were generally the outgoing friendly types who were socially active on campus (24). Haller and Bray found that foreign students tended to like American students who were intellectually oriented. (26).

Studies concentrating on foreign students enrolled in American colleges and universities were generally found in one of three main areas. These areas were: (a) studies pertaining to the problems and difficulties of foreign students, (b) studies focusing on the attitudes and personality characteristics of foreign students, and the environmental factors involved in each situation, and (c) studies pertaining to the changes that occur in foreign students over a long or short period of time as a result of their sojourn experience.

The results of three different investigations showed that certain basic factors were related to the problems of foreign students (20; 35; 43). Among the most consistent variables affecting foreign students' adjustment were country of origin, academic status, and interpersonal relations. According to the findings of these investigations many of the difficulties encountered by foreign students could be alleviated by: (a) more counseling, (b) more orientation, and (c) better housing accommodations (20; 35; 43).

In a different study, Sewell and Davidson found that certain personality attributes of foreign students, such as appearance, language facility, and socio-economic status tended to exert a strong influence on the degree of favorable or unfavorable attitudes that the foreign students held toward various aspects of American life (51). One of the most important factors in the favorable adjustment of foreign students, however, was the extent and intimacy of their contacts with Americans (51). Furthermore, similar conclusions concerning foreign student adjustment were drawn by Morris who stated that the amount of contact with Americans was related to satisfaction with the cross-cultural experience more so than the factor of national status (39).

The influence of environmental factors on foreign and American student interaction was investigated by Selltiz in two major studies; and the results of these studies showed that several factors influenced the quantity of interaction (49). These factors were: (a) personal characteristics of the

individual, (b) environmental opportunities, and (c) the orientation programs. Of the personal characteristics examined, the students' national-cultural background was the most consistent influence on the extent of interaction; but environmental opportunities also contributed in varying degrees depending upon the type of institutional setting and the living arrangements provided (49).

The long range impact on the attitudes and personalities of foreign students as a result of their exchange visits was investigated by several writers (5;44;64;66). The general conclusions from these studies indicated that short term enthusiastic attitudes gradually faded into more subtle feelings of satisfaction about the sojourn experiences (5;44;64;66).

In reviewing the research on the complex personality variables involved in cross-cultural interaction, two distinct tendencies or predispositions were noted. These tendencies were: (a) the tendency to constrict one's thinking to a narrow ethnocentric view of life and society, and (b) the tendency to attach an unfavorable stereotype to people who are different from one's self.

The tendency to constrict one's view of life and society was revealed distinctly in the studies involving the use of the "Worldmindedness Scale" (21;48;53). Two typologies of individuals were revealed on this Scale--the exceptionally nationalistic individual and the exceptionally worldminded individual. The exceptionally worldminded individuals were characterized as

being more liberal in political views, much less authoritarian, and considerably more favorable toward democratic ideology than the nationalistic individuals (53). Also, these worldminded people were more easy going and carefree and more oriented toward interpersonal relations than the nationalistic individuals (53).

Factors which encouraged individuals to think in terms of stereotypes were studied by numerous investigators (10;18;23;30;45). The results of several of these studies showed that persons draw upon knowledge gained from both personal and public sources in forming stereotyped images of minority and ethnic group members (23;30). In another study, Bjerstedt found that close personal association between children of different nationalities tended to have a positive influence in encouraging cross-cultural friendships (9). Bjerstedt's conclusions were confirmed by the findings of the studies done for the UNESCO "Tensions Project" (11;45). These investigators concluded that education and foreign contact and acquaintance tended to modify stereotypes (11;45).



## Chapter III

## METHODS AND PROCEDURES

The main objective of this study was to analyze and describe the impact of foreign students upon those American students who had the greatest amount of contact with them. Within the scope of this main objective nine specific objectives were stated which delineated various aspects of the problem. This investigation attempted to accomplish these objectives by identifying 554 close American student friends of foreign students and obtaining three types of information from each of these students. The three types of information included 13 items of personal data, the scores from two personality inventories, and responses to 25 personal interview questions. The personal data items obtained for analysis were: age, sex, marital status, campus housing unit, class standing, field of study, home state, size of home town, participation in high school and college activities, military service experience, birthplaces of parents, educational levels of parents, and occupations of parents. On the personality inventories the male and female mean scores were obtained for each variable of the Edwards Personal Preference Values. The personal interview data included the students' responses on the following topics: (a) cross-cultural patterns of friendship, (b) American students' perceptions of foreign students, (c) the extent of foreign students' influence on the American students, (d) American students' perceptions of other Americans' attitudes, (e) attitudes toward financial

aid for foreign students, and (f) opinions about foreign students' housing and personal difficulties.

In order to accomplish the specific objective of determining the differences between those students who lived in a residence center and who were named as friends by foreign students and those students who lived in the same Center but who were not named as friends, it was necessary to obtain a comparative population of "not named" students. This comparative group of not named students was obtained from the population of the Graduate Residence Center (GRC) which is a part of the Indiana University residence halls system. In this GRC 13 separate buildings housed almost 1200 students during the fall of 1963, including approximately 277 foreign students. Its common dining room, lounge facilities, and Center library offered a high level of interaction potential; and, therefore, it was assumed that all of the GRC American students had an equal opportunity to become acquainted with the foreign students living there.

Obtaining the named population. A major procedural problem was to obtain the names of American students who were friends of the 756 foreign students on the Bloomington campus during the Fall of 1963. Because of the heterogeneity of this population, in terms of country of origin and cultural backgrounds, it was recognized that many foreign students might consider a request for names of close friends as an infringement upon their privacy. It was also recognized that the term "close friend" might cause considerable

semantic difficulty within such a diverse group. Therefore, a meeting was held with several foreign student leaders to elicit their reactions to the problem. As a result of this meeting it was agreed that:

(1) Most foreign students would be willing to cooperate with the request for names of close friends if they were informed about the purposes of the study.

(2) Due to the lack of time and the expense involved, the large number of foreign students on campus prohibited their being contacted personally; therefore, the names of the close friends would be collected by means of a questionnaire.

(3) The question requesting the names of close friends could best be defined for the foreign students if it were preceded with questions pertaining to casual friends and acquaintances.

(4) The purpose of the study would be publicized in advance through campus news media and presentations at foreign student meetings.

(5) Responses to the questionnaire would be more favorable if it were distributed by foreign student representatives rather than by mail.

The first form of the foreign student questionnaire was constructed in September of 1963. In order to obtain the names of close friends and descriptive information about the foreign student population the questionnaire contained personal data items, questions pertaining to attitudes about social relations, interests and activities, and the request for names of close American student friends. (A copy of the final form of the Questionnaire is presented in Appendix A.)

Efforts to publicize the study through presentations began at a meeting of the Graduate Residence Center Foreign Student Committee on October 31, 1963, when the Investigator

explained the purpose of the study and distributed copies of the preliminary questionnaire. The Committee expressed a favorable attitude toward the objectives of the study and offered suggestions for clarifying the structuring of the questionnaire so that it would be more easily understood and interpreted by foreign students. The members also indicated that they would assist in the distribution of the questionnaire.

In November the Investigator met with the presidents of the foreign student national groups and explained the background and purposes of the study. The presidents agreed with the goals to be achieved by the study and offered their support and cooperation in the distribution of the questionnaire to members of their groups.

Following these discussions with foreign student leaders a letter explaining the purposes and objectives of the study was sent to all foreign students on campus. (A copy of this letter is presented in Appendix B.) Furthermore, the study was publicized campus-wide by a series of articles in the University's student newspaper.

As a result of the suggestions made by members of the Foreign Student Committee and the presidents of the national groups the questionnaire was revised before final printing. Members of these groups cooperated to distribute the questionnaire and explanatory letter to all foreign students on campus during the first week of January, 1964. To insure

that all students were contacted, the questionnaire was mailed to all foreign students who lived off campus. Students who received the questionnaire in their housing units were requested to return it to their foreign student Representative. Students who received the questionnaire in the mail were asked to return it to the Dean of Students' Office.

One week after the questionnaires were distributed a reminder letter was sent to all foreign students requesting them to complete the questionnaire and return it to the Dean of Students' Office. (A copy of this letter is presented in Appendix C.) A final attempt to obtain completed questionnaires was made during Registration for the Spring semester. As a part of their academic enrollment procedure all foreign students were asked to complete the questionnaire if they had not already done so.

At the end of Spring Registration, 1964, 530 out of 756 students, or 70 per cent, had returned completed questionnaires.

The completed questionnaires contained a total of 926 names of American students, including 159 duplications. Of the 767 different students named, 195 were eliminated because they failed to meet the requirements of being native born American students enrolled at the Bloomington campus during the Spring semester of 1964. Thus, there remained a named population of 572 American students for the study.

Obtaining the Graduate Residence Center named population. In order to accomplish the specific objective of



comparing a named and a not named group of students who lived in the same residence center, it was necessary to obtain the population of Graduate Residence Center students who had been named as friends by foreign students who also lived in the Graduate Residence Center. The names of the 572 American students who had been named as friends were arranged alphabetically on a master list and the campus addresses of these students were checked. It was revealed that of these 572 named students, 186, or 33 per cent, lived in the Graduate Residence Center. By locating the names of these students on the foreign student questionnaires it was found that of the 186 GRC named students, only 148 had been named as friends by foreign students who lived in the Graduate Center. These 148 American student friends of Graduate Residence Center foreign students became the named residence center population for the study.

Obtaining the Graduate Residence Center not named population. Since 277 foreign students lived in the Graduate Residence Center during the Fall of 1963 and since all residents shared the same common dining room and lounge facilities, it was believed that each American student who lived there had the same opportunity as any other American student to make friends with these foreign students. Therefore, the alphabetical master list of named students was checked against the official room roster of the Graduate Residence Center. It was found that of the American students who had lived in the Center during the Fall of 1963,



and who were still living there during the Spring semester of 1964, 475 had not been named as friends by foreign students. These 475 students became the not named comparative population for the investigation.

Obtaining the data. In order to ascertain the impact and influence of the foreign students on the American students two general types of information were needed from the American students. These types of information were: (a) objective information of the origin and development of the students' present friendships with foreign students, and information on previous experiences with foreign people, and (b) subjective information concerning the students' attitudes and perceptions of foreign students. Since much of the information concerning the association of American students with foreign students was based on subjective judgment, it was believed that a personal interview utilizing open-end questions would yield more valid data than a rigidly structured, objective type questionnaire. Therefore, a personal interview was conducted with each student in the named and not named population.

The interview guide. To facilitate the recording of the information gained from the open-ended questions in the interviews, a semi-structured interview guide was constructed. This interview guide contained the questions to be asked in each interview and it also contained checklists of possible responses to each question. The checklists

enabled the interviewers to record most of the responses quickly, but spaces were also provided for adding additional comments or responses which were not among those on the checklists. The questions on the interview guide and the statements which the interviewers used to introduce each group of questions were as follows:

I think it will be easier if you start by thinking of one foreign student that you know fairly well. We don't want his name, but for general identification purposes could you tell me what country he comes from? \_\_\_\_\_ Where does he live in Bloomington? \_\_\_\_\_ Now could you give me a brief history of your acquaintance?

- 1a. How did you first meet him (her)?
- b. Where do you usually get together?
- c. What interests do you have in common?
- 2a. Have you made friends with other foreign students?
- b. Are they from other countries?
- 3a. Did you know any foreign people before you came to Indiana University?
- b. Where did you know them?
- 4a. Have you conversed with foreign students in any language other than English?
- b. What languages?
5. We are also interested in your general opinion of foreign students. Since you know some of them (fairly) well, how would you say they differ most from American students?
- 6a. Do you think foreign students really get to know us? (Americans they come in contact with)
- b. What do foreign students think of us?

Now let's change the subject a bit. How has knowing these foreign students affected you?

- 7a. Have you developed any new interests?
- b. Has it changed your attitudes on any question at home or abroad?
- c. Have you changed any of your plans for the future?

8. How do other Americans react to American students associating with foreign students?
- 9a. Do you think the federal government should give financial aid to foreign students?
  - b. Should Indiana University, a state supported university, help foreign students financially?
- 10a. Now one last question. Just what do you think of the over-all arrangements for foreign students here at Indiana University?
  - b. What kind of difficulties do they have?
  - c. What could be done about it?

(A copy of the final form of the interview guide is presented in Appendix D)

Interviewing methods and procedures. In January of 1964 a chief interviewer and a team of seven interviewers were hired to conduct the personal interviews. Three of the interviewers were wives of faculty members and four were advanced graduate students in the social science fields. During the last week of January and the first three weeks of February the chief interviewer conducted four training sessions in the techniques and skills of interviewing.

At the first meeting of the interviewers, which lasted three hours, the aims and objectives of the project were presented and each item on the interview guide was explained. Since many of the items were open-ended questions, reliable results were dependent upon accurate and consistent judgments by the interviewers. Care was taken to clarify the exact meaning of each question and the correct method for recording possible responses to each question. Throughout this entire explanation of the interview items proper techniques of interviewing were stressed.

The last part of this first meeting was devoted to a discussion of the Edwards Personal Personal Preference Schedule and the Allport-Vernon-Lindzey Study of Values. Each interviewer was given written materials covering the rationale and structure of each inventory. At the close of the meeting the interviewers were asked to role play a trial interview with a friend or family member before the next meeting so that they would become more familiar with the interview guide and the interviewing techniques.

During the week following the first meeting of the interviewing team introductory letters explaining the project were sent to approximately 100 students in both the named and not named populations. This letter indicated that the students had been named as a friend of a foreign student and it contained a request for the student to participate in a personal interview with a member of the Dean of Students' staff. Each week thereafter, as interviews were completed, additional letters were sent to other students on the lists. (A copy of this letter is presented in Appendix E.)

The trial interviews that were conducted with a friend or family member were evaluated at the second meeting of the interviewers. As a result of this evaluation several items were revised and a second form of the interview guide was planned. After the evaluation of the trial interviews, the chief interviewer discussed the standardized procedures for

contacting the students by telephone and for arranging the interviews. It was explained that the interviews were to be conducted at the students' convenience in their living Units or in rooms that had been reserved for this purpose in various academic buildings on campus. Also, to increase the consistency of each student contact, the interviewers were given a printed statement to be used in introducing themselves on the telephone. (A copy of the statement is presented in Appendix F.) At the close of the meeting each interviewer was given a list of names of students who had already received the introductory letters and was instructed to complete five preliminary interviews with these students before the next meeting of the team.

The third meeting of the interviewers was held after they had completed the preliminary interviews. These preliminary interviews were discussed and evaluated and as a result a few minor revisions were made in the format of the interview guide. The final form of the interview guide was printed after this third meeting of the interviewers.

Final instructions and the semester time schedule for completing the interviews were also given at the third training session. Lists containing twenty names of students had been prepared from the master lists of the named and not named populations and each interviewer was given one list. When the students on this list had been interviewed the interviewers were instructed to return the completed interview guide to the Dean of Students' Office and obtain another



list. Students in the not named population were interviewed in exactly the same manner as the students in the named population; and the interviewers did not know whether a student was in the named population or the not named population.

It was recognized that since the questions in each interview would consume approximately 30 to 45 minutes, the completion of the personality inventories at the same time would extend the conference beyond reasonable time limits. Therefore, test packets had been prepared which contained the following items: (a) the two personality inventories, (b) an EPPS machine scoring sheet, (c) an electrographic pencil, and (d) a self-addressed envelope to the Dean of Students' Office. The interviewers were instructed to explain the purpose of the inventories at the end of each interview and ask the student to complete them at his own convenience, and mail them back to the Dean of Students' Office.

In April a follow-up letter, requesting students to complete the inventories and to return the test packets, was sent to all students who had not returned completed tests. (A copy of this letter is shown in Appendix G.)

A fourth and final meeting of the interviewers was held in order to clarify any additional problems that might have arisen in the course of their initial interviews. As the semester progressed, however, problems were resolved on an individual basis by the chief interviewer.

Personality inventories. It was hoped that additional information about the characteristics of the students could be obtained through the use of personality inventories. The Edwards Personal Preference Schedule and the Allport-Vernon-Lindzey Study of Values were selected because of their suitability for a college population and the types of variables which they measure.

The Edwards Personal Preference Schedule is a 225 item, forced choice device which is based on Murray's theory of personality (19:5). This Scale is made up of 15 variables or "needs" which, according to Murray, motivate individuals to act or react in certain ways (40:123-129). The variables measured on the Edwards are the following:

- |                 |                     |
|-----------------|---------------------|
| 1. Achievement  | 9. Dominance        |
| 2. Deference    | 10. Abasement       |
| 3. Order        | 11. Nurturance      |
| 4. Exhibition   | 12. Change          |
| 5. Autonomy     | 13. Endurance       |
| 6. Affiliation  | 14. Heterosexuality |
| 7. Intraception | 15. Aggression      |
| 8. Succorance   |                     |

Scores from this instrument may be interpreted as indicating the relative strength of personal preference for a variety of different activities and interpersonal relationships. The split-half reliabilities, or coefficients of internal consistency, for the 15 variables ranged from .60 to .87 on the scores in the normative sample (58:554). Attempts have been made to determine the validity of the EPPS by correlating it with several other personality inventories, but the results of these correlations offer no over all validity figures (19:21-22).

The Allport-Vernon-Lindzey Study of Values Inventory attempts to measure six personality traits postulated by Spranger in the book, Types of Men (3:3). This scale contains six broad categories of interests or values designed to characterize personality types. The six categories are:

- |                |              |
|----------------|--------------|
| 1. Theoretical | 4. Social    |
| 2. Economic    | 5. Political |
| 3. Aesthetic   | 6. Religious |

The 1951 revised Scale has a split-half reliability coefficient of .90 (3:9), but again, as with the Edwards, the validity data offer conflicting reports on the true factors being measured.

Personal data items. Personal data were obtained for each student in the named and not named populations from the records on file in the Dean of Students' Office. The items of data recorded for each student were: age, sex, marital status, campus address, class standing, home state, size of home town, participation in college activities, military service experience, field of study, birthplaces of father and mother, educational levels of father and mother, and occupations of father and mother.

Completion of the interviewing. Since it was expected that all students would be interviewed by the end of the semester, no attempt was made to randomly select students to be interviewed. The original interview lists were made up alphabetically from the master lists, but if an interviewer was unable to reach a student after several attempts the name of

that student was withheld and placed on a new list at the end of the file. The interviewing continued until the last week of the 1964 Spring semester and by that time 554 of the 572 students, or 97 per cent, in the named population had been interviewed. In the not named population 330 out of 475 students, or 69 percent, had been interviewed. A summary of the named, not named, and foreign student populations is shown in Table 1.

TABLE 1. NUMBER AND PER CENT OF STUDENTS IN EACH POPULATION OF THE STUDY

Population	Number	Per cent*
1. Foreign students enrolled at the Bloomington Campus	756	
2. Foreign students enrolled on campus who returned questionnaires	530	70
3. American students named as friends on the questionnaire	572	
4. American student friends who were interviewed	554	97
5. Foreign students living in the Grad- uate Residence Center	277	
6. GRC foreign students who returned questionnaires	193	69
7. GRC American students named as friends on the questionnaires	148	
8. GRC friends who were interviewed	148	100
9. GRC students in the not named popu- lation	475	
10. GRC students in the not named popula- tion who were interviewed	330	69

\*Per cents rounded to nearest whole number.

Table 1 shows that of the 756 foreign students on campus during the Fall of 1963, 530, or 70 per cent, returned questionnaires. These 530 questionnaires contained the names of 572 American student friends; and of these 572 friends, 554, or 97 per cent, were interviewed for the study. All of the 148 American students living in GRC and named as friends by foreign students also living in GRC were interviewed. Of the 475 not named American students living in the GRC and comprising the comparative population, 330, or 69 per cent, were interviewed.

The two personality inventories, the EPPS and the Study of Values, comprised the second part of the interview contact. Each student was requested to complete the inventories at his or her own convenience and return them by mail to the Dean of Students' Office. Of the 554 students who were interviewed in the named population 304, or 54 per cent, completed the EPPS and 310, or 55 per cent, completed the Study of Values. In the not named population, 169, or 51 per cent, completed the EPPS and 161, or 48 per cent, completed the Study of Values.

#### Organization of Data

A manilla folder was prepared for each student in the named and not named populations; and when a completed interview guide was returned by an interviewer it was checked for errors and omissions and then filed in the student's folder.



As completed test packets were received through the mail the tests were sorted and scored. The Study of Values was hand scored by members of the research staff and the EPPS score sheets were sent to the Bureau of Educational Studies and Testing in the School of Education to be machine scored.

Thus, a completed folder for a student contained: (a) an interview guide, (b) a Study of Values booklet, and (c) an EPPS score sheet.

#### Coding of Data

In June of 1964 a coding supervisor and six coders were hired to code the data. All of the coders were advanced graduate students familiar with research procedures. The supervisor trained the six coders individually and coordinated the coding of all data. To increase the reliability of the coding procedure all errors, omissions, and unusual responses in the data were cleared through the supervisor.

Each of the two alphabetical master lists of students in the named and not named populations was coded in numerical sequence. These code numbers were then used to represent the students' names for the statistical treatment of the data.

In order to insure reliable coding of each item of data code folders containing explicit instructions for coding

the foreign students' questionnaires and the American students' data were prepared in June of 1964.

Coding of the foreign students' questionnaires.

Each foreign student questionnaire code folder contained a coded questionnaire and the following coded lists: (a) foreign countries, (b) fields of study, (c) religions, and (d) the named population. A sequential numerical code was used for each question and the correct code number for the responses to each item was listed in the questionnaire in the folder--except for those items that required reference to one of the coded lists. Each item was coded in the left hand margin of the questionnaire and the data were punched on IBM cards directly from each questionnaire.

Coding of the American students' data. The American student code folder contained a set of instructions for coding the responses to each item of personal data, the raw scores on the personality inventories, and the responses to each question in the personal interview. In addition, the code folder contained the following coded lists: (a) the named population, (b) the not named population, (c) the 50 states and the District of Columbia, (d) occupational groupings, (e) fields of study, and (f) foreign countries. Furthermore, population figures on the size of home cities were obtained from the 1964 World Almanac. (70)

Except for the raw scores from the personality inventories, a number series was used to code the responses to each item of data.

Because of the fact that the American students' data were drawn from three different sources it was necessary to collate all of the data on one printed form for the IBM key punching process. Therefore, the 80 column format of an IBM card was duplicated on legal size paper and the data were coded on this simulated IBM form. Three of these forms were used to code the personal data items, personality inventories scores, and the interview data for each student.

Personal data were obtained from the records in the Dean of Students' Office and each item was coded according to the instructions in the code folder. The personal data items recorded for each student were: age, sex, marital status, campus address, class standing, home state, home city, participation in high school or college activities, military service experience, field of study, birthplaces of parents, educational levels of parents, and occupations of parents. The responses which were numerically coded for each item were as follows:

1. age--in number of years
2. sex--male and female
3. marital status--single or married
4. campus address
  1. Graduate Residence Center
  2. Undergraduate Residence Halls
  3. Married housing units
  4. Fraternity and/or sorority houses
  5. Trailer courts
  6. Campus Club
  7. Housing out-in-town
5. home state--all of the 50 states and the District of Columbia were coded in numerical sequence on a separate list. The appropriate coded number was recorded for each student.

For the statistical treatment of the data the states were combined into regional groupings; and a list of the regional groupings is presented in Appendix H.

6. home town--the home town of each student was recorded according to the town's population as listed in the 1964 World Almanac and according to its place in the following population groupings:
  1. under 2500
  2. 2501-10,000
  3. 10,001-25,000
  4. 25,001-50,000
  5. 50,001-100,000
  6. over 100,000
7. participation in activities--yes or no
8. military service experience--yes or no
9. field of study--a copy of the list of academic fields and the major groupings utilized in the statistical treatment of these data is shown in Appendix I.
10. class standing--a numerical sequence was used to code the class standing of each student from the freshman through graduate levels.
11. birthplaces of fathers and mothers--the birthplaces were coded according to their being:
  1. born in the United States
  2. foreign born
12. educational levels of fathers and mothers--the total number of years was recorded
13. occupations of fathers and mothers--the occupations of parents were coded on the basis of broad fields of work and then were grouped into the following occupational levels for the statistical treatment of the data:
  1. professional and managerial
  2. semi-professional and skilled
  3. semi-skilled and unskilled
  4. housewives, retired, deceased, and unemployed

The raw scores for the males and females in the named and not named populations were recorded for each variable on the personality inventories. The variables from the Edwards Personal Preference Schedule were: (19)

- |                  |                       |
|------------------|-----------------------|
| 1. Achievement   | 9. Dominance          |
| 2. Deference     | 10. Abasement         |
| 3. Order         | 11. Nurturance        |
| 4. Exhibition    | 12. Change            |
| 5. Autonomy      | 13. Endurance         |
| 6. Affiliation   | 14. Heterosexuality   |
| 7. Intracception | 15. Agression         |
| 8. Succorance    | 16. Consistency score |

The variables recorded from the Study of Values (3) were:

- |                |              |
|----------------|--------------|
| 1. Theoretical | 4. Social    |
| 2. Economic    | 5. Political |
| 3. Aesthetic   | 6. Religious |

The simulated IBM form which was used to record the American student data contained most of the objective responses which were elicited from the students on each question of the personal interview. Therefore, for each response that was checked on the interview guide a code number was recorded in the matching response column on the IBM form. If a response was not listed on the IBM form the number "one" was placed in the "other" response column for that particular question. The objective responses listed on the interview guide for each question were as follows:

#### Interview Questions:

1a. How did you first meet him (her)?

##### Academic areas

1. class
2. laboratory
3. department seminar
4. library

##### Living arrangements

1. American student's room
2. Foreign student's room
3. Residence hall lounge
4. Residence hall dining room

##### Informal and spontaneous social contacts

1. mutual acquaintance
2. someone else's home
3. private party
4. sports area
5. campus hangout
6. dating
7. self-introduction by American student

- 8. self-introduction by foreign student
- 9. accidental meeting
- 10. in transit
- 11. abroad

Organized activities

- 1. Cosmopolitan Club
- 2. National student clubs
- 3. YMCA and YWCA
- 4. Student Union

Church

Other

No foreign student known well

1b. Where do you usually get together?

The same response categories used in question 1a were used in 1b.

1c. What interests do you have in common?

- 1. Academic
- 2. Social
- 3. Athletic
- 4. Cultural
- 5. Church
- 6. People
- 7. USA
- 8. His country
- 9. Other countries
- 10. Other (events, etc.)

2a. Have you made friends with other foreign students?

- 1. yes
- 2. no

2b. Are they from other countries or regions of the world?

- 1. Same country
- 2. Other countries (same region)
- 3. Other regions of the world
- 4. More than one region

3a. Did you know other foreign people before you came to Indiana University?

- 1. yes
- 2. no

3b. Where did you know them?

- 1. home community
- 2. other schools
- 3. travel
- 4. overseas residence
- 5. family
- 6. other



4a. Have you conversed with foreign students in any language other than English?

1. yes
2. no
3. a little

4b. What languages?

1. French or Spanish
2. foreign student's language
3. other languages

5a. How would you say foreign students differ most from American students?

(On this question the interviewer indicated by symbols--+, -, or 0, if the foreign students had more, less, or just differed from American students in certain traits or ways.)

- |                    |                            |
|--------------------|----------------------------|
| 1. dress           | 11. intellectual interests |
| 2. food            | 12. college preparation    |
| 3. social customs  | 13. serious students       |
| 4. personal habits | 14. knowledge of languages |
| 5. language        | 15. shyness                |
| 6. money           | 16. maturity               |
| 7. problems        | 17. age                    |
| 8. religion        | 18. isolated group         |
| 9. ethics          | 19. other                  |
| 10. culture        |                            |

6a. Do you think foreign students really get to know us?

1. yes
2. no
3. incompletely
4. some do and some don't
5. do not let us know

6b. What do foreign students think of us?

1. like - like very much
2. indifferent
3. dislike - dislike very much
4. some like us - some dislike us
5. do not let us know
6. other answer

7. How has knowing foreign students affected you?

a. Have you developed any new interests?

1. language
2. geography
3. culture
4. foreign affairs
5. government-politics
6. economics
7. broadened generally
8. other answer

7b. Has knowing foreign students changed your attitudes on any question at home or abroad?

1. Race
2. religion
3. U.S. values
4. U.S. policies
5. foreigners
6. foreign cultures
7. foreign affairs
8. foreign countries
9. other answer

7c. Have you changed any of your plans for the future?

1. travel
2. study abroad
3. new courses
4. learn new language
5. new vocation
6. Peace Corps
7. other answer

8a. How do other Americans react to American students associating with foreign students?

Friendship

1. favorably - very favorably
2. indifferently
3. unfavorably - very unfavorably
4. no opinion

Dating relationships

1. favorably - very favorably
2. indifferently
3. unfavorably - very unfavorably
4. no opinion

9a. Do you think the federal government should give financial aid to foreign students?

1. approve - strongly approve
2. indifferent
3. disapprove - strongly disapprove
4. no opinion

9b. Do you think Indiana University, a state supported university, should give financial aid to foreign students?

1. approve - strongly approve
2. indifferent
3. disapprove - strongly disapprove
4. no opinion

10a. What do you think of the over-all arrangements for foreign students here at Indiana University?

- 10a. continued
1. good
  2. fair
  3. poor
  4. do not know
- 10b. What kind of difficulties do they have?
1. language
  2. loneliness
  3. prejudice
  4. homesickness
  5. customs
  6. fears
- 10c. What can be done about their difficulties?
1. orientation
  2. higher standards
  3. counseling

### Treatment of Data

Total named population. The main objective of this study was to analyze and describe the impact of foreign students upon those American students who had the greatest amount of contact with them. Therefore, three main types of data obtained from these American students were as follows: (a) personal data, (b) interview data, and (c) inventory scores.

In order to characterize these named American students each personal data item and each personal interview response was tabulated in terms of a frequency and percentage count.

On each of the two personality inventories, the Edwards Personal Preference Schedule and the Allport-Vernon Lindzey Study of Values, the raw scores were averaged for the males and for the females on each variable. Thus, the following four categories resulted: (a) mean scores for males on each

variable of the EPPS, (b) mean scores for females on each variable of the EPPS, (c) mean scores for males on each value of the Study of Values, and (d) mean scores for females on each value of the Study of Values.

For the EPPS the mean scores for males and females were converted to the percentiles which were provided in the Edwards' Manual of Directions (19). Also, the t-ratio was employed to determine the significance of the difference between the male and female mean scores on each of the 15 variables and the consistency score.

On the Study of Values inventory the t-ratio was used to determine the significance of the difference between the mean score of named males and the corresponding mean score of the named females on each of the six values. The t-ratio was also used to determine the significance of the difference between: (a) each mean score of the named males and the corresponding mean score of the norm group males, and (b) each female mean score and the corresponding female norm group mean score for each of the six values.

The formula for obtaining the t-ratio is as follows\*:

$$m = \frac{\quad}{n-1}$$

Where:

m = standard error of the mean  
= standard deviation

and,

$$\text{diff} = m_1 + m_2$$

\*See Underwood, (110:125:127)

where:

diff = standard error of the difference

$m_1$  = standard error of mean one

$m_2$  = standard error of mean two

and,

$$t = \frac{m_1 - m_2}{\text{diff}}$$

where:

t = significance of the difference between the means

m = Mean one

m = Mean two

Comparative populations. A specific objective of this study was to determine the differences between 148 students who lived in the Graduate Residence Center and who were named as friends by foreign students and 330 students who lived in the same Center but who were not named as friends by foreign students. Thus, these two populations, the named and the not named students, comprised the comparative populations. These two populations were compared to determine if there were statistically significant differences between the two groups on each item of: (a) personal data, (b) interview data, and (c) each variable on the personality inventories.

For the personal data and the interview responses the scoring method used expressed either a response or a lack of response for each item. Thus, these data resulted in classified



frequencies. Because the data resulted in classified frequencies the statistical treatment used to determine differences was the  $\chi^2$  (chi square) test of significance. The formula for the  $\chi^2$  value is as follows:

$$\chi^2 = \frac{(O - E)^2}{E}$$

Where: O = observed frequency

E = the corresponding expected frequency  
(61:204)

The analysis of variance technique was used to compare the differences between the groups on each variable of the personality inventories. The formula for obtaining the F value is as follows\*:

$$SS_{tot} = (X - M_{tot})^2$$

where:  $SS_{tot}$  = Total Sums of Squares

X = A raw score

$M_{tot}$  = The mean of all the scores in both groups

$$SS_{wg} = (X_1 - M_1)^2 + (X_2 - M_2)^2$$

where:  $SS_{wg}$  = Sums of squares within groups

$X_1$  = A raw score from group 1

$M_1$  = The mean of the scores from group 1

$X_2$  = A raw score from group 2

$M_2$  = The mean of the scores from group 2

\*See Underwood, (61:180-192)

$$SS_{bg} = SS_{tot} - SS_{wg}$$

where:  $SS_{bg}$  = Sums of squares between groups

$$MS_{bg} = \frac{SS_{bg}}{df_{bg}}$$

where:  $MS_{bg}$  = the mean square between groups

$df_{bg}$  = degrees of freedom between groups

and where  $df_{bg} = K - 1$

where  $K$  = the number of groups

$$MS_{wg} = \frac{SS_{wg}}{df_{wg}}$$

where:  $MS_{wg}$  = Mean square within groups

$df_{wg}$  = Degrees of freedom within groups

and where:  $df_{wg} = N_{tot} - K$

$N_{tot}$  = Total number of scores

$K$  = number of groups

And: 
$$F = \frac{MS_{bg}}{MS_{wg}}$$

Differences were accepted as significant at the .05 level of confidence and very significant at the .01 and the .001 level of confidence.\*

The statistical treatment of the data was handled by the Research Computing Center on the Bloomington campus of Indiana University.

\*See Selltiz and others, (50:417-422) for further discussion of statistical significance.

## Chapter IV

## ANALYSIS OF DATA OF THE TOTAL NAMED POPULATION

The main objective of this study was to analyze and describe the impact of foreign students upon American students. More specifically, this investigation attempted to: (a) identify and characterize the American students who were named as close friends by foreign students, (b) ascertain the origin, nature, and extent of their relationships, (c) describe the effect of these associations upon the American students, and (d) determine the attitudes and perceptions of American students toward foreign students.

In order to obtain the names of American student friends of foreign students, in January, 1964, all foreign students on the Indiana University campus were asked to complete a personal data questionnaire. Although this questionnaire contained personal and attitudinal type questions, the main item was a request for the names of close American student friends. In view of the nature of the information being sought, a concentrated effort was made to publicize the study at student meetings, through the campus newspaper, and by letters to the foreign students, before the questionnaire was distributed. Members of the I.U. Graduate Residence Center Foreign Student Committee, working in cooperation with the presidents of various foreign national groups, distributed questionnaires to the 756 foreign students enrolled during the

1963 fall semester. Of the 756 questionnaires distributed, 530, or 70 per cent, were completed and returned.

The 530 completed questionnaires contained a total of 926 names of American friends, although 159 of these represented duplications. Of the 767 different students named once, 195 were eliminated because they failed to meet the requirement of being native born American students enrolled on the Bloomington campus during the spring semester of 1964. Thus there remained a working population of 572 American students, and of this number, 554, or 96 per cent, were interviewed for this study.

The population of 554 American students named as friends by foreign students was interviewed during the spring semester of 1964. As part of the interview contact, students were asked to complete two personality inventories -- the Edwards Personal Preference Schedule and the Allport-Vernon-Lindzey Study of Values. Out of the total population of the 554 students who were interviewed, 304, or 54 per cent, completed the EPPS and 310, or 55 per cent, completed the Study of Values.

In addition to the information obtained in the personal interviews and the personality inventories, 13 items of personal data were extracted for each student from the records on file in the Dean of Students' Office.

The foreign and American student data obtained in this investigation are presented in this chapter in the following manner:

- I. The Indiana University Foreign Student Population
  - A. Personal and background characteristics
  - B. Attitudes and preferences toward interpersonal and social relationships

- II. The Indiana University Named American Student Population

- A. Personal data characteristics

1. Sex
    2. Age
    3. Marital Status
    4. Campus housing unit
    5. Class standing
    6. Field of Study
    7. Participation in activities
    8. Military Service
    9. Size of home town
    10. Home state
    11. Education of parents
    12. Birthplace of parents
    13. Occupation of parents

- B. Personality inventory scores

1. Male scores on the Edwards Personal Preference Schedule
    2. Female scores on the Edwards Personal Preference Schedule
    3. Male scores on the Study of Values
    4. Female scores on the Study of Values

- C. Personal interview responses

1. Cross-cultural patterns of friendship
    2. American student's perceptions of foreign students
    3. Extent of foreign student's influence on American students
    4. American student's perceptions of other Americans' attitudes
    5. Attitudes toward financial aid for foreign students
    6. Opinions about foreign students' housing and personal difficulties



### **The Indiana University Foreign Student Population**

Since the composition of foreign student populations varies from campus to campus the generalization of the results of this study to other American student populations and to other university campuses would be to a great extent dependent upon the characteristics of the Indiana University foreign student population. Consequently, although the focus of this investigation centered upon the American student population, the distinctive features of the foreign student population must be delineated.

During the fall of 1963 there were 756 foreign students enrolled at Indiana University, and of these 756, 530, or 70 per cent returned completed questionnaires. Therefore, the characteristics of the Indiana University foreign student population is based upon the responses obtained in these 530 questionnaires.

Personal and background characteristics. The average age of the foreign students at Indiana University during the fall of 1963 was 27.3 years; and 369, or almost 70 per cent, were males and 161, or about 30 per cent, were females. Also, 333, or 63 per cent, of these students were single, and 197, or 37 per cent, were married. Of these 197 married students, 129, or 64 per cent, were here with their spouses, while 68, or 36 per cent, were here without their spouses. From the standpoint of the family unit, 50 students indicated that their children were with them; another 108 students said

their children were not with them. The number of children in a family ranged from one to five.

A variety of housing accommodations are available to students in the university community and Table 2 shows the types of housing units occupied by the foreign students.

**TABLE 2. NUMBER AND PER CENT OF INDIANA UNIVERSITY FOREIGN STUDENTS LIVING IN VARIOUS HOUSING ACCOMODATIONS**

Accomodation	Number	Per cent*
1. Graduate Residence Center	193	36
2. Apartment in town	157	30
3. Married housing	91	17
4. Undergraduate residence hall	43	8
5. Rooming house in town	17	3
6. Room in private home	16	3
7. Fraternity or sorority	7	1
8. Campus Club	4	.75
9. Other	2	.38
Total	530	99.13
*Per cent rounded to nearest whole number where appropriate		

As seen in Table 2 the largest number of foreign students, 193, or 36 per cent, resided in the Graduate Residence Center

during the fall of 1963. The second largest number, 157, or 30 per cent, lived in apartments in town. The smallest number of students, 4, or one per cent, lived in the Campus Club, which is a hotel-type housing unit of the university that provides single rooms for students; and two students indicated that they lived in types of housing other than those mentioned on the list.

Home countries were given by 521, or 98 per cent, of the students and a list of these countries appears in Table 3.

TABLE 3. NUMBER OF INDIANA UNIVERSITY FOREIGN STUDENTS FROM VARIOUS COUNTRIES

Country	Number of Students	Country	Number of Students
1. Afghanistan	4	36. Jordan	1
2. Argentina	7	37. Kenya	1
3. Australia	3	38. Korea	18
4. Belgium	2	39. Kuwait	1
5. Bermuda	1	40. Laos	1
6. Brazil	22	41. Lebanon	1
7. British West Indies	1	42. Liberia	3
8. Burma	4	43. Malaysia	4
9. Canada	40	44. Mexico	3
10. Chile	4	45. Nepal	2
11. China	41	46. Netherlands	1
12. Colombia	3	47. New Zealand	1
13. Congo	1	48. Nigeria	8
14. Costa Rica	2	49. Pakistan	18
15. Cuba	3	50. Panama	1
16. Cyprus	8	51. Poland	2
17. Denmark	1	52. Puerto Rica	3
18. El Salvador	1	53. Peru	1
19. England	25	54. Philippines	15
20. Ethiopia	1	55. Ryukyu Islands	6
21. Finland	2	56. Saudi Arabia	2
22. France	4	57. Somali	3
23. Germany	16	58. South Africa	1
24. Greece	9	59. Southern Rhodesia	5
25. Guinea	1	60. Spain	1
26. Haiti	1	61. Sudan	2
27. Hong Kong	14	62. Sweden	3
28. India	31	63. Switzerland	1
29. Indonesia	18	64. Syria	5
30. Iran	25	65. Tanganyika	1
31. Iraq	9	66. Thailand	40
32. Israel	3	67. Turkey	2
33. Italy	4	68. Uganda	1
34. Jamaica	3	69. USSR	5
35. Japan	18	70. United Arab Rep.	18
		71. Venequela	4
		72. Yemen	1
		73. Yugoslavia	1
		No Answer	11

Table 3 shows that 73 countries were represented in the group of 530 foreign students who returned questionnaires. The countries with the largest numbers of students were China, Canada, Thailand, and India. In order that the cultural backgrounds and general characteristics of the students as a group might be more adequately defined the distribution of the number and per cent of the students from areas of the world is shown in Table 4. (A list of the countries in each world area is presented in Appendix J.)

**TABLE 4. NUMBER AND PER CENT OF INDIANA UNIVERSITY FOREIGN STUDENTS FROM AREAS OF THE WORLD**

World Area	Number	Per cent*
1. Far East	212	40
2. Near and Middle East	80	15
3. Europe	77	14.5
4. Africa	46	8.6
5. South America	41	7.7
6. North America	41	7.7
7. Central America	18	3.3
8. Oceania	4	.7
9. Country not given	11	2
<b>Total</b>	<b>530</b>	
*Per Cent rounded to nearest whole number where appropriate		

According to Table 4 the largest group of foreign students at Indiana University was from the Far East, the second largest group was from the Near and Middle East, and the third greatest number was from Europe. By combining the first and second groups in Table 4 it was found that Asian students comprised 55 per cent of the Indiana University foreign student population.

Further information on background characteristics was obtained by asking an optional question on the questionnaire which pertained to religion. Table 5 presents the various religious beliefs of the foreign students.

**TABLE 5. NUMBER AND PERCENT OF INDIANA UNIVERSITY FOREIGN STUDENTS ADHERING TO VARIOUS RELIGIOUS BELIEFS**

Religion	Number	Per cent*
1. Islam (Moslem)	94	17.7
2. Protestant	83	15.6
3. Roman Catholic	78	14.7
4. Buddhism	46	8.68
5. No religion	33	6.2
6. Christianity	20	3.7
7. Hinduism	15	2.8
8. Greek Orthodox	10	1.89
9. Judaism	7	1.3
10. Other religions	7	1.3
11. Did not answer	137	25.85
<b>Total</b>	<b>530</b>	<b>99.72</b>
*Per cent rounded to nearest whole number where appropriate.		



As seen in Table 5, 94, or 17 per cent, of the students indicated that they held the Islamic faith; and 83, or 16 per cent, were Protestant. The third largest group was the Catholic with 78, or 15 per cent, of the foreign students in this category. It should be noted that there is an overlap in the breakdown of religions. Catholic, Protestant, and Greek Orthodox are actually included in Christianity. The Greek Orthodox are also Catholics. Table 5 shows the actual responses given by the foreign students.

In regards to previous travel, 101, or 19 per cent, of the students indicated that they had been in the United States before and 429, or 81 per cent, stated that this was their first visit. Furthermore, these students had been in the United States an average of 19.1 months on this visit, and they expected to stay an average of 20 months longer. Information on the students' motivations was obtained by asking, "Which one of the following was your major reason for coming to the United States?"; and their responses are shown in Table 6.

**TABLE 6. NUMBER AND PER CENT OF INDIANA UNIVERSITY FOREIGN STUDENTS GIVING MAJOR REASONS FOR COMING TO THE UNITED STATES**

Major reason	Number	Per cent*
1. To study in a special field	438	82.6
2. To get a general education	40	7.5
3. To live in another country and to get to know the people	26	4.9
4. Other reasons	19	3.5
5. Did not answer	7	1.
Total	530	99.5
*Per cent rounded to nearest whole number where appropriate		

The greatest number of students, 438, or 83 per cent, indicated, according to Table 6, that their major reason for coming to the United States was to study in a special field.

Educationally these students were at various levels of training and Table 7 presents the analysis of the academic degrees sought by the foreign students.

**TABLE 7. NUMBER AND PER CENT OF INDIANA UNIVERSITY FOREIGN STUDENTS SEEKING ACADEMIC DEGREES**

Academic degree	Number	Per cent
1. Master's	199	37.55
2. Doctor's	171	32.26
3. Bachelor's	87	16.4
4. Not a degree candidate	69	13.
5. Did not answer	4	.7
Total	530	99.91

The educational interests of the foreign students spanned a wide range of academic spectrum and Table 8 shows the major fields in which the students were enrolled.

TABLE 8. NUMBER AND PER CENT OF INDIANA UNIVERSITY FOREIGN STUDENTS MAJORING IN VARIOUS FIELDS OF STUDY

Major field	Number	Per Cent*	Major field	Number	Per Cent*
<u>Languages and Literatures</u>			<u>History, Geography and Related fields</u>		
1. Comparative Literature	8		1. Anthropology	3	
2. English	14		2. History	10	
3. Folklore	11		3. Fine Arts	5	
4. French	2		4. Geography	10	
5. German	2		5. History and Philosophy of Science	1	
6. Italian	1		6. Asian Studies	1	
7. Linguistics	43			30	6
8. Slavic Lang.	2				
9. Spanish	3				
	86	16			
<u>Government</u>			<u>Professional and Social Service Fields</u>		
1. Government	43		1. Law	2	
2. Economics	27		2. Optometry	5	
3. Business	40		3. Pre-medicine	5	
	110	20	4. Allied Health Sciences	1	
<u>Biological and Physical Sciences</u>			5. Social Services	2	
1. Astronomy	1		6. Nursing	1	
2. Anatomy and Physiology	1			16	3
3. Bacteriology	2				
4. Biology	4		<u>Music</u>		
5. Botany	4			29	6
6. Chemistry	29		<u>Behavioral Sciences</u>		
7. Geology	9		1. Psychology	12	
8. Physics	16		2. Sociology	10	
9. Zoology	7			22	4
10. Mathematics	11				
	84	16	<u>Other fields</u>		
<u>Education</u>			1. Journalism	4	
	128	24	2. Speech & Theatre	2	
			3. Home Economics	6	
			4. Police Administration	2	
			5. Undecided	6	
			6. No answers	5	
				25	5

\*Per cent rounded to nearest whole number.

As seen in Table 8 the Indiana University foreign students were majoring in 42 different fields, six of the students were undecided, and five students did not give their academic major. The largest number of students, 128, or 24 per cent, was in education; and 110, or 20 per cent, of the students were in fields related to government. The fields of languages and literatures were given by 86, or 16 per cent, of the students and 84, or 16 per cent, were in the science fields.

Attitudes and preferences toward interpersonal and social relationships. Three questions were included in the questionnaire in which students were asked to indicate: (a) what per cent of their free time, approximately, was spent with American students, (b) what per cent of their free time was spent with people of their own nationality, and (c) what per cent of their free time was spent alone. Table 9 shows the numbers of students and the per cent of their free time that they spent alone and with others.

**TABLE 9. NUMBER AND PER CENT OF INDIANA UNIVERSITY FOREIGN STUDENTS REPORTING PER CENT OF TIME SPENT WITH AMERICAN STUDENTS, OWN NATIONALS, AND ALONE**

Per cent of time	American students		Own Nationals		Alone	
	Number	Per cent*	Number	Per cent	Number	Per cent
More than 50	144	27	71	14	89	17
40 to 50	50	9	44	8	57	11
30 to 40	43	8	49	9	52	9
20 to 30	58	11	68	13	89	17
10 to 20	83	16	90	17	91	17
Less than 10	131	25	182	34	127	24
No answer	21	4	26	5	25	5
Total	530	100	530	99	530	99
*Per cent rounded to nearest whole number						

Of the 530 students returning questionnaires, 144, or 27 per cent, stated, according to Table 9, that they spent more than one-half of their free time with American students; and 131, or 25 per cent, indicated that they spent less than 10 per cent of their free time with American students. Only 71 students, or 13 per cent, spent more than 50 per cent of their free time with fellow nationals; and 182, or 34 per cent, indicated that they spent less than 10 per cent of their free time with fellow nationals. In answer to the question concerning the amount of free time spent alone, 89 students, or 17 per cent, said that they spent more than one-half of this free



time alone and 127, or 24 per cent, of the students spent less than 10 per cent of their free time alone.

The foreign students were asked to whom they would go if they were faced with a serious personal problem and the responses to this question are shown in Table 10.

**TABLE 10. NUMBER AND PER CENT OF INDIANA UNIVERSITY FOREIGN STUDENTS' PREFERENCES FOR HELP WITH A PERSONAL PROBLEM**

Preferences	Number	Per cent*
1. Some from Dean Dowling's office (foreign student advisor)	155	29
2.. A friend from your own country	137	26
3. An American friend	86	16
4. A friend from another country	8	2
5. Other preference	52	10
6. More than one of the above checked	47	9
7. No answer	45	8
Total	530	100
*Per cent rounded to nearest whole number		

Table 10 shows that when faced with a serious personal problem more than one-half of the foreign students would seek help from someone in Dean Dowling's office (the foreign student

advisor) or from a fellow national. Of the remaining students, 86, or 16 per cent, indicated that they would ask an American friend, and 8 students, or two per cent, said that they would ask a friend from another country. Other preferences were indicated by 52 of the students and 45 students declined to answer this question.

The extent of social interaction with Americans was another point of interest in the study and therefore the students were asked about their visits to American homes. Of the 530 students, 434 said that they had been invited to visit in American and 419, or 79 per cent, indicated that they enjoyed their visits to various homes. In regards to the number of times these students had visited in American homes, 223, or 42 per cent, said that they had been invited at least once, and 142, or 26 per cent, had been invited more than ten times.

Three questions were included in the questionnaire which elicited the personal preferences of the foreign students for choosing: (a) a companion to attend a social event, (b) someone with whom to study a class assignment, and (c) someone to visit with them in their native countries. The responses to these questions are shown in Tables 11, 12, and 13.

**TABLE 11. NUMBER AND PER CENT OF INDIANA UNIVERSITY FOREIGN STUDENTS' PREFERENCES FOR CHOOSING A COMPANION FOR A SOCIAL EVENT**

Preference	Number	Per cent*
1. Someone from the United States	255	48
2. Someone from your own country	94	18
3. No preference	92	17
4. Someone from another country	20	4
5. Depends on the person	18	3
6. Depends on the event	7	1
7. No answer	44	9
Total	530	100
*Per cent rounded to nearest whole number		

The largest number of Indiana University foreign students indicated in Table 11 that they would prefer to go to a social event with an American and the second largest number of students stated that they would choose someone from their own country. In the other largest categories, 92 students, or 17 per cent, said that they had no preference; and 44, or 8 per cent, of the students did not answer the question.

The students' preferences for choosing someone with whom to study a class assignment are shown in Table 12.

**TABLE 12. NUMBER AND PER CENT OF INDIANA UNIVERSITY FOREIGN STUDENTS' PREFERENCES FOR CHOOSING SOMEONE WITH WHOM TO STUDY A CLASS ASSIGNMENT**

Preference	Number	Per cent*
1. Someone from the United States	299	56
2. No preference	75	14
3. Someone from your own country	61	12
4. Someone from another country	20	4
5. Depends on the person	16	3
6. Depends on the course	11	2
7. No answer	48	9
Total	530	100
*Per cent rounded to nearest whole number		

According to Table 12, 299 students, or 56 per cent, stated that they would choose an American friend to study with; and 75, or 14 per cent, of the students indicated that they had no preference on this question. Also, 48, or 9 per cent, of the students failed to respond to this question.

Table 13 shows the preferences indicated by the students when they were asked, "If you had the opportunity to invite someone to visit your home in your native country, whom would you invite?"

**TABLE 13. NUMBER AND PER CENT OF INDIANA UNIVERSITY FOREIGN STUDENTS' PREFERENCES FOR INVITING SOMEONE TO VISIT THEM IN THEIR NATIVE COUNTRY**

Preference	Number	Per cent*
1. Someone from the United States	319	60
2. No Preference	113	21
3. Someone from another country	20	4
4. Someone from your own country	14	3
5. Other answers	14	3
6. No answer	50	9
Total	530	100
*Per cent rounded to nearest whole number		

Of the 530 students in the population, 319, or 60 per cent, stated, according to Table 13, that they would choose to invite an American to visit them in their native country; and 113, or 21 per cent, had no preference for inviting someone to visit with them. Also, 50 students, or 9 per cent, did not answer this question.

A list of activities was presented in the questionnaire and students were asked to indicate whether or not they thought the activities were helpful in promoting cross-cultural interaction. The responses to this item are shown in Table 14.

**TABLE 14. RESPONSES OF INDIANA UNIVERSITY FOREIGN STUDENTS CONCERNING THE EFFECTIVENESS OF CERTAIN ACTIVITIES IN PROMOTING CROSS-CULTURAL INTERACTION**

Activity	Response	
	Yes	No
1. Cosmopolitan Club	333	35
2. YM/YWCA activities	287	48
3. Foreign Student Receptions	264	54
4. Graduate Residence Center Foreign Student Committee	202	64
5. National groups and their activities	182	71
6. Campus religious groups	152	93

According to Table 14 more students answered yes to each activity than the number of students who answered no; and of the activities listed, the Cosmopolitan Club and the YM/YWCA activities received more yes votes than any of the others. Furthermore, in response to an additional question concerning participation, 366, or 69 per cent, of the students indicated that they had participated in one or more of the activities listed in Table 14. Also, 395, or 74 per cent, stated that informal parties and activities were more helpful than organized activities in encouraging interaction between foreign and American students.

In discussing foreign students' preferences for companions, tables 11, 12, and 13 indicate the preference of foreign students for choosing a companion for a social event,



a class assignment, and for inviting someone to visit them in their native country.

Table 14 lists the foreign students' responses to a question concerning the effectiveness of certain activities in promoting cross-cultural interaction. The high "yes" votes for all of them indicates the enthusiasm of foreign students and the desire to have cross-cultural interaction.

There was a relatively low number of votes for Graduate Residence Center foreign students committee despite the fact that subsequent information indicated that this is the place where most foreign students have the greatest degree of cross cultural interaction.

#### The Indiana University Named American Student Population

Personal data items. As a means of characterizing the 554 students named as friends by foreign students, 13 items of personal data were obtained from the records on file in the Dean of Students office at Indiana University.

1. Of the 554 named friends 370, or 67 per cent, were males and 184, or 33 per cent, were females. It is interesting to note here that this two to one male to female ratio is almost identical with the male and female ratio of the foreign student population.

2. The average age of the 554 named friends was 25.2 years. The average of the 370 males was 25.8 years and the 184 females averaged 24.3 years of age. Ages for these students ranged from 19 to 58 years and Table 15 shows the number and per cent of the males and females in each four year age interval.

**TABLE 15. NUMBER AND PER CENT OF MALES AND FEMALES IN EACH :  
FOUR YEAR AGE INTERVAL**

Interval	Males	Females	Total	Per cent*
19-22	96	80	176	32
23-26	159	68	227	42
27-30	58	18	76	12
31-34	25	8	33	6
35-38	14	3	17	3
39-42	15	3	18	3
43-46	2	2	4	1
Over 46	1	2	3	1
<b>Total</b>	<b>370</b>	<b>184</b>	<b>554</b>	<b>100</b>
*Per cent rounded to nearest whole number				

Table 15 shows that the largest percentage of named friends was in the 23-26 age bracket; and the second largest percentage of students was in the 19-22 years bracket. Also, only seven students, or about two per cent, were found to be in the 43 years and over age groups.

3. In terms of marital status more than two thirds of these students were single; but a description of the marital status of the friends is shown in Table 16.

**TABLE 16. NUMBER AND PER CENT OF NAMED FRIENDS IN VARIOUS CATEGORIES OF MARITAL STATUS**

Marital Status	Number	Per cent*
1. Single	381	68
2. Married	166	30
3. Divorced	4	.72
4. Widowed	1	.18
5. Married to foreign-born spouses	2	.36
Total	554	99.26
*Per cent rounded to nearest whole number where appropriate		

As seen in Table 16, 381, or 68 per cent, of the named population were single and 166, or 30 per cent, were married to other Americans. Also, five of the students were either divorced or widowed and two of these named friends were married to foreign-born spouses.

4. Since Indiana University offers a diverse selection in types of housing and since the housing accommodations might have influenced the extent of, and opportunity for foreign and American student interaction, the various living units occupied by these friends was a vital part of this study. Therefore, the number and percent of named friends living in various types of housing accommodations is presented in Table 17.

TABLE 17. NUMBER AND PER CENT OF NAMED FRIENDS LIVING IN VARIOUS TYPES OF HOUSING ACCOMODATIONS

Housing Accomodation	Male	Female	Total	Per cent*
1. Graduate Residence Center	110	76	186	33
2. Housing Out-in-town	115	32	147	26
3. Undergraduate Residence halls	59	53	112	20
4. Married housing	63	10	73	13
5. Fraternity and/or sorority houses	15	11	26	5
6. Trailer courts	8	1	9	2
7. Campus Club	0	1	1	.18
Total	370	184	554	99.18
*Per cent rounded to nearest whole number where appropriate				

Table 17 shows that 186, or 33 per cent, of the named friends lived in the Graduate Residence Center, which is a part of the Indiana University Halls of Residence system. This co-educational Center houses about 1200 students and during the academic year of 1963-64 there were approximately 277 foreign students residing there.

It can also be seen in Table 17 that the second largest number, 147, or 26 per cent, of the named population lived in apartments, homes, or rooming houses in town. The third largest groups of students, 112, or 20 per cent, lived in the undergraduate residence halls, and 73, or 13 per cent, lived

in university owned married housing units. The Campus Club, a university-owned hotel-type structure, was given as a residence by only one student.

5. In regard to class standing, the greatest number of the named friends were graduate students. The total number of male and female students in each class level is shown in Table 18.

TABLE 18. NUMBER AND PER CENT OF NAMED FRIENDS AT VARIOUS LEVELS OF ACADEMIC STANDING

Class standing	Males	Females	Total	Per cent*
1. Freshman	16	20	36	6
2. Sophomore	22	16	38	7
3. Junior	35	26	61	11
4. Senior	32	30	62	11
5. Graduate	265	91	356	64
6. Special student	0	1	1	.18
Total	370	184	554	99.18
*Per cent rounded to nearest whole number where appropriate				

According to Table 18, 36, or 6 per cent, of the named friends were freshmen and 62, or 11 per cent, were seniors. The largest number, 356, or 64 per cent, were graduate students; and only one student indicated that she was enrolled as a special student and not in a degree program.

6. Academic fields were also a major factor in characterizing the students named as friends by foreign students because of possible similarities in interests and other personality variables. Consequently, to obtain an over-all picture of the academic interests of these students the major fields were arbitrarily grouped into nine categories. These categories and major fields are presented in Table 19 along with the number of students majoring in each field and the number and per cent of students in each category.



TABLE 19. NUMBER OF NAMED FRIENDS MAJORING IN VARIOUS ACADEMIC FIELDS

Field	Number	Per cent	Field	Number	Per cent
<u>Languages and Literature</u>			<u>History, Geography, and others</u>		
1. Comparative Literature	8		1. Anthropology	10	
2. East Asian Languages and Literature	3		2. History	20	
3. Slavic Languages and Literature	15		3. Fine Arts	6	
4. French	14		4. Philosophy	5	
5. German	6		5. Geography	5	
6. Italian	1		6. Social Studies	3	
7. Spanish	10		7. History and Philosophy of Science	5	
8. English	28		8. Asian Studies	1	
9. Linguistics	15		9. Uralic and Altaic Studies	2	
10. Folklore	6			57	10
	106	19	<u>Professional and Social Science Fields</u>		
<u>Government</u>			1. Law	15	
1. Government	39		2. Optometry	7	
2. Economics	9		3. Pre-medicine	8	
3. Business	46		4. Allied Health Services	1	
	94	17	5. Social Service	2	
<u>Biological and Physical Sciences</u>			6. Nursing	6	
1. Bacteriology	4			39	7
2. Astronomy	5		<u>Music</u>		
3. Biology	1			41	8
4. Botany	1		<u>Behavioral Sciences</u>		
5. Chemistry	29		1. Psychology	17	
6. Geology	11		2. Sociology	12	
7. Physics	11			29	6
8. Zoology	8		<u>Other Fields</u>		
9. Mathematics	13		1. Journalism	2	
	83	15	2. Speech and Theatre	10	
<u>Education</u>			3. Mass Communications Radio & T.V.	5	
	79	14	4. School of Letters	1	
			5. Undecided	8	
				26	4

In Table 19 the largest number of named friends are shown to be majoring in languages and literature; and of the 554 friends, 106, or 19 per cent, were in these fields. Government ranked second in terms of number of students with 94, or 17 per cent, of the population in this category. Students in the biological and physical sciences ranked third with 83, or 15 per cent, of the total, while education contained 79, or 14 per cent, of the named friends. History and its related fields contained 57, or 10 per cent, of the named population, and the remaining fields of professional and social sciences, behavioral sciences, music, and other fields each contained less than 10 per cent of the students.

7. Another point of interest concerning the personal attributes of the students named as friends by foreign students was their participation in high school or college activities. The number and per cent of students who participated in extracurricular activities is shown in Table 20.

TABLE 20. NUMBER AND PER CENT OF NAMED FRIENDS WHO HAVE PARTICIPATED IN HIGH SCHOOL OR COLLEGE EXTRACURRICULAR ACTIVITIES

Participated	Males	Females	Total	Per cent*
Yes	310	157	467	84
No	42	17	59	11
Information not available	18	10	28	5
Total	370	184	554	100

\*Per cents rounded to the nearest whole number

Table 20 shows that 467, or 84 per cent, of the named friends had participated in high school or college extra-curricular activities. Only 59, or 11 per cent, had not participated in any activities; and information was not available on the remaining 28, or 5 per cent, of the students.

8. The military service experience of these students was considered to be a possible factor in their attitudes toward foreign students and therefore this information was obtained from university records. Table 21 shows the results of these tabulations.

TABLE 21. NUMBER AND PER CENT OF NAMED FRIENDS WHO SERVED IN THE MILITARY SERVICES

Served	Number	Per cent*
Yes	81	15
No	462	83
Information not available	11	2
Total	554	100
*Per cent rounded to nearest whole number		

Of the 554 named friends only 81, or 15 per cent, according to Table 21, served in the military service. The greater number, 462, or 83 per cent, had no military service; and information was not available on 11, or 2 per cent, of the population.

9. Since it was believed that students from large metropolitan cities might reflect attitudes toward foreign students different from students from small town or rural areas, the size of each student's home town was obtained from the New World Almanac. The populations of the cities and towns were then divided into six levels and the tabulations resulting from these divisions is shown in Table 22.

TABLE 22. NUMBER AND PER CENT OF NAMED FRIENDS LIVING IN VARIOUS SIZE HOME TOWNS

Town Population	Males	Females	Total	Per cent*
1. Under 2500	58	33	91	16
2. 2501 to 10,000	57	20	77	14
3. 10,001 to 25,000	53	17	70	13
4. 25,001 to 50,000	74	32	106	19
5. 50,001 to 100,000	16	12	28	5
6. Over 100,000	112	70	182	33
Total	370	184	554	100
*Per cent rounded to nearest whole number				

Table 22 shows that the largest number of students, 182, or 33 per cent, lived in cities of over 100,000 people, and 28, or 5 per cent, lived in cities with 50,001 to 100,000 population. At the other end of the population scale, there were 91, or 16 per cent, of the students who lived in towns of less than 2500 persons; and 77, or 14 per cent, of the named friends resided in towns with 2501 to 10,000 people. In looking at

these two lower categories it can be seen that a total of 30 per cent of the students came from towns with less than 10,000 people. On the other hand, the two highest categories contained a total of 38 per cent of the named friends. Thus, the remaining 32 per cent of the students resided in medium size towns with populations ranging from 10,001 to 50,000.

10. In addition to the home town populations, data were obtained on the home states of each named friend. Table 23 gives the number of friends from each geographical region and state in the United States.

TABLE 23. NUMBER AND PER CENT OF NAMED FRIENDS FROM EACH STATE AND GEOGRAPHICAL REGION OF THE COUNTRY

State and Region	Number	Per cent	State and Region	Number	Per cent
<u>Middle States</u>			<u>Southeast</u>		
Illinois	28		Alabama	2	
Indiana	281	50	Arkansas	1	
Iowa	3		District of Columbia	2	
Michigan	13		Florida	4	
Minnesota	8		Georgia	2	
Missouri	8		Kentucky	10	
Ohio	24		Louisiana	5	
Wisconsin	4		Mississippi	1	
	<u>369</u>	67	North Carolina	3	
			South Carolina	1	
			Tennessee	2	
			Virginia	<u>10</u>	
				43	8
<u>Northeast</u>			<u>Northwest</u>		
Connecticut	6		Colorado	2	
Delaware	1		Idaho	2	
Massachusetts	9		Kansas	5	
Maryland	7		Montana	1	
New Hampshire	2		Nebraska	1	
New Jersey	10		North Dakota	1	
New York	39		South Dakota	1	
Pennsylvania	14			<u>13</u>	2
Rhode Island	3				
Vermont	1				
West Virginia	3				
	<u>95</u>	17			
<u>Southwest</u>			<u>Far West</u>		
Arizona	6		California	8	
New Mexico	1		Hawaii	1	
Oklahoma	5		Oregon	1	
Texas	10		Washington	1	
Utah	1			<u>11</u>	2
	<u>23</u>	4			



As can be seen in Table 23 the largest number of named friends resided in the state of Indiana, and these 281 Indiana residents comprised 50 per cent of the 554 named friends. When these 281 students were combined with the other students from the central part of the country, a total of 369, or 67 per cent, of the named friends were shown to have resided in the eight middle states. The second largest number of students, 95, or 17 per cent, in the named group came from 12 states in the Northeast region of the country. As might be expected because of the greater distance from Indiana, the smallest percentages of friends came from the Northwest and Far West regions of the country in that each of these regions contained two per cent of the total population.

Another facet of interest about the characteristics of these named friends of foreign students concerned three items of information about their parents. It was believed that pertinent information about their parents might reflect certain similarities or differences; and therefore, the educational backgrounds, birthplaces, and occupations of their mothers and fathers were tabulated.

11. The average number of years of education for the fathers of the named students was 13.1 years, and the average number of years for the mothers was 13.09 years. Thus, it was found that on the average, the parents of these students completed one year of higher education.

12. In tabulating the birthplaces of the students' fathers and mothers two main categories were used: (a) born

in the United States, and (b) foreign born. Table 24 gives the number and per cent of the fathers and mothers born in the United States and in foreign countries.

TABLE 24. NUMBER AND PER CENT OF NAMED STUDENTS' FATHERS AND MOTHERS BORN IN THE UNITED STATES OR FOREIGN BORN

Birthplace	Father		Mother	
	Number	Per cent*	Number	Per cent*
United States	435	79	452	82
Foreign born	46	8	31	5
Information not available	73	13	71	13
Total	554	100	554	100
*Per cents rounded to nearest whole number				

According to Table 24, 435, or 79 per cent, of the fathers and 452, or 82 per cent, of the mothers were born in the United States. There were 46, or eight per cent, of the fathers and 31, or five per cent, of the mothers born in foreign countries. Information was not available on 13 per cent of the fathers and 13 per cent of the mothers.

13. In order to determine the relative economic status of the students' parents their occupations were categorized and then grouped into three occupational levels. The number and per cent of parents in each of these levels, plus two additional descriptive categories, are shown in Table 25.

TABLE 25. NUMBER AND PER CENT OF NAMED STUDENTS' FATHERS AND MOTHERS IN VARIOUS OCCUPATIONAL LEVELS

Occupational Level	Fathers	Mothers	Total	Per cent*
Professional and managerial	158	75	233	21
Semi-Professional and skilled	175	39	214	19
Semi-skilled and unskilled	102	60	162	15
Housewives, Retired, Unemployed, and Deceased	40	306	346	31
Information not available	79	74	153	14
Total	554	554	1108	100
*Per cent rounded to nearest whole number				

As can be seen in Table 25 the largest number of parents were found in the professional and managerial levels, and the smallest number (in terms of actual occupations) was found in the semi-skilled and unskilled level. There were 233, or 21 per cent, of the parents in the professional and managerial level; while 162, or 15 per cent, of the parents were categorized in the semi-skilled and unskilled level. Considering both the occupational levels and the two descriptive categories, it was found that the largest number of parents were in the group termed housewives, retired, unemployed, and deceased. In this category of persons not actually in the labor force there were 346, or 31 per cent, of the parents. There was no information available on 153, or 14 per cent, of the students' parents.

Summary of personal data items. The average age of the 554 American students named as friends by foreign students was 25.2 years; and of these 554, 370, or 67 per cent, were males and 180, or 33 per cent, were females. In terms of marital status 381, or 68 per cent, were single and 173, or 32 per cent, were married or had been married at one time prior to the personal interviews.

These American friends of foreign students lived in seven different types of housing arrangements at the Bloomington campus, although the largest number, 186, or 33 per cent, lived in the Graduate Residence Center. Various accommodations out-in-town such as apartments and rooming houses accounted for 147, or 26 per cent, of the students, while 112, or 20 per cent, of the students lived in undergraduate residence halls and 73, or 13 per cent, lived in the university's married housing units.

Graduate students comprised the largest single group of friends in terms of class standing with 356, or 64 per cent, in this category. Only 36, or six per cent, of the students were freshmen and 62, or 11 per cent, were seniors.

Languages and literature were the academic major fields for 106, or 19 per cent, of the friends, and 94, or 17 per cent, were majoring in fields related to government and business. There were 83, or 15 per cent, of the students in the biological and physical sciences, while 79, or 14 per cent, of the students were in education.

Upon investigating the previous extracurricular experiences of the named students it was found that 467, or 84 per cent, of the 554 had participated in high school or college activities. Also, 81, or 15 per cent, of the students had served in the military services but 462, or 83 per cent, had not been in the service.

The largest number, 182, or 33 per cent, of the students came from home towns of over 100,000 populations, while only 91, or 16 per cent, came from home towns with populations of less than 2500. In terms of home states and regions of the country it was found that the largest number, 281, or 50 per cent, of these students came from the state of Indiana and a total of 369, or 67 per cent, of the total population came from the eight states in the middle region of the country. The smallest percentages of named friends came from the Northwest and the Far west regions of the country in that each of these regions contained about two per cent of the total population.

It was also found that the parents of these named students averaged 13.1 years of education and that 435, or 79 per cent, of the fathers and 452, or 82 per cent, of the mothers were born in the United States. Also, 233, or 21 per cent, of these parents were employed in professional and managerial positions while 162, or 15 per cent, were employed in semi-skilled or unskilled occupations.

Personality Inventories. In order to determine possible trends in personality characteristics of the named students they were asked to complete two personality inventories. These two inventories were the Edwards Personal Preference Schedule and the Allport-Vernon-Lindzey Study of Values.

The EPPS contains 15 variables, or "needs", which according to Murray, motivate people to act or react in certain ways (40). Scores from this instrument may be interpreted as indicating the relative strength of personal preferences for a variety of activities and interpersonal relationships (40: 123-129). Based on a possible 28 points for each of the variables, a high score indicates a strong need and a low score indicates a lesser need. In the population of 554 named friends, 304, or 54 per cent, completed the EPPS. Of these 304 students, 203 were males and 101 were females. The average consistency score for each male and female group exceeded 11 points; and according to Edwards a consistency score of 11 or above indicates that the results are fairly reliable (19:15).

The Study of Values Inventory attempts to measure six personality traits postulated by Spranger and contains six broad categories of interests or values (3:3). According to the authors of this inventory, scores on these six values reveal the relative importance of each value in a given personality (3:3). Of the 554 named students 310, or 55 per cent, completed the Study of Values; and 206 of these were males and 104 were females.



Since the EPPS and the Study of Values were interpreted by sex the following categories resulted: male scores on the EPPS; female scores on the EPPS; male scores on the Study of Values; and female scores on the Study of Values. For each variable of the EPPS the male and female mean scores and standard deviations were calculated; and the mean scores were then converted to percentiles (19:12). Also, the t-ratio was employed to determine the significance of the differences between the male and female means on each of the 15 variables and the consistency score.

1. Table 26 shows the means, standard deviations, and percentiles for the 203 male students, and also indicates the significant differences between the means for the 203 male and the 101 female students on the EPPS.

TABLE 26. MEAN SCORES, STANDARD DEVIATIONS, AND PERCENTILES OF THE NAMED MALES ON THE EDWARDS PERSONAL PREFERENCE SCHEDULE

Variable	Mean	Standard Deviation	Percentile
1. Achievement	16.931*	4.34	66
2. Deference	11.340	3.85	52
3. Order	10.251	4.56	54
4. Exhibition	13.527	3.62	49
5. Autonomy	14.325	4.29	52
6. Affiliation	14.542	4.42	54
7. Intraception	16.483	5.18	51
8. Succorance	10.414	4.87	50
9. Dominance	16.680*	4.75	45
10. Abasement	11.685	5.13	53
11. Nurturance	14.315	5.30	55
12. Change	15.714	4.86	57
13. Endurance	14.167*	5.40	64
14. Heterosexuality	16.670	5.91	45
15. Agression	11.828*	4.61	47
Consistency Score	11.783	2.04	68

N = 203

\*Significantly larger than the corresponding female mean at the .01 level of confidence.

According to Table 26, out of the possible 28 points the mean scores for males ranged from 10.251 to 16.931; and this highest mean was obtained on the Achievement variable. When converted on the percentile table it was found that this score fell at the 66th percentile of the college men's norm group. Thus, the mean Achievement score obtained by the named males exceeded 66 per cent of the males in the normative sample. Since this Achievement scale purports to measure a need to be successful, to do things better than others, and to accomplish tasks requiring skill and effort, it would seem to

indicate that the average named male student desired to achieve success as much, if not more than, the average male college student in the normative sample (19:11).

The second and third highest mean scores for males were on the Dominance and Heterosexuality variables. On the Dominance scale the mean score was 16.680, which ranked at the 45th percentile. Therefore, in comparison with the college male norm group the named males only averaged higher than 45 per cent of the sample group. This score of 16.680 would indicate then, that the named males were just about average in their need to persuade and influence others, to be leaders in groups, and to make group decisions (19:11).

On the Heterosexuality variable the named males averaged 16.670 points out of the possible 28 points and this score also fell at the 45th percentile. Again it was indicated that when compared with the male norm group these males were just about average in their need to be regarded as physically attractive by those of the opposite sex, to date, and to socialize with women (19:11).

Although the mean score of 14.167 on the Endurance variable did not rank high in relation to the other mean scores, it did fall at the 64th percentile when compared to the norm group. Consequently, it was assumed that these named males were slightly above average in their need to complete any job undertaken, to work hard at a task, and to put in long hours of work without distraction (19:11).

In regard to the t-ratios which were computed on the male and female mean scores, it was found that differences were significant at the .01 level of confidence on four of the 15 variables. The male mean scores were significantly higher than the female means on the Achievement, Dominance, Endurance, and Aggression variables. In comparison, on the male and female college sample means, the male norm group was shown to be significantly higher on the Achievement, Dominance, and Aggression variables; but as contrasted with the named males, the norm group was also higher on the Autonomy and Heterosexuality scales. The male norm group, however, was not significantly higher than the female norm group on the Endurance variable (19:10).

2. Mean scores, standard deviations, and percentiles on the EPPS were computed for the 101 females in the named population and these results are presented in Table 27.

TABLE 27. MEAN SCORES, STANDARD DEVIATIONS, AND PERCENTILES OF THE NAMED FEMALES ON THE EDWARDS PERSONAL PREFERENCE SCHEDULE

Variable	Mean	Standard Deviation	Percentile
1. Achievement	14.683	3.97	72
2. Deference	11.634	4.09	50
3. Order	9.336	4.87	46
4. Exhibition	13.020	3.36	42
5. Autonomy	14.792	4.04	77
6. Affiliation	16.535*	4.24	50
7. Intraception	18.990*	4.65	66
8. Succorance	11.950*	4.66	51
9. Dominance	13.050	4.78	42
10. Abasement	13.446*	4.70	37
11. Nurturance	16.445*	4.59	50
12. Change	18.040*	4.73	59
13. Endurance	12.297	5.11	50
14. Heterosexuality	14.960	5.77	57
15. Aggression	9.831	4.81	51
Consistency Score	12.040	2.03	63

N = 101

\*Significantly larger than the corresponding male mean at the .01 level of confidence.

Mean scores shown in Table 27 ranged from 9.336 on the Order variable to 18.990 on the Intraception variable. This score of 18.99 on Intraception fell at the 66th percentile of the college women's normative group and therefore it was assumed that the named females were just slightly above average in the need to observe others, to analyze their own motives and feelings, and to understand how others feel about problems (19:11).

The second highest mean score for the named females was 18.040 points on the Change variable. On the percentile table this score fell at the 59th percentile and tended to indicate that these women were about average in their need to meet new people, to travel, and to do new and different things, and to experience novelty and change in daily routine (19:11).

Affiliation ranked third in the mean scores at 16.535, and this score fell at the 50th percentile. This percentile score showed that 50 per cent of the college female norm group were below the named females and 50 per cent scored above them on this variable. Therefore, the named females again reflected the same need as the normative group females to participate in friendly groups, to form new friendships, and to do things with friends rather than alone (19:11).

It can also be seen in Table 27 that two of the mean scores ranked rather high in percentiles even though the scores themselves were not at the top of the mean ranking. The mean score of 14.792 on Autonomy fell at the 77th percentile and revealed that the named females averaged better than 77 per cent of the females in the normative sample. This score tended to indicate a relatively strong need on the part of the named females to be independent of others in making decisions, to do things that are unconventional, and to do things without regard to what others may think (19:11).

A mean score of 14.683 on the Achievement variable fell at the 72nd percentile and therefore exceeded 72 per cent of the normative sample. It was assumed that this score indicated



a fairly strong need for the named females to be successful, to do a difficult job well, and to be able to do things better than others (19:11).

The t-ratios computed on the male and female mean scores resulted in differences which were significant at the .01 level of confidence on six of the 15 variables. The variables on which the females scores higher were: Affiliation, Intraception, Succorance, Abasement, Nurturance, and Change. In referring to the mean difference in the normative sample it was found that the female norm group also reflected higher means on these same variables plus a higher mean on the Difference variable (19:10).

For the Study of Values Inventory the male and female mean scores and standard deviations were computed on each of the six values. Furthermore, the t-ratio was used to determine the significance of the difference between the named male and female means on each value and also between each named male and female mean and the corresponding male and female norm group mean.

3. The means and standard deviations on the Study of Values for 206 males in the named group along with the mean scores for the males in the normative sample are presented in Table 28.

TABLE 28. MEANS AND STANDARD DEVIATIONS OF THE NAMED MALE STUDENTS AND THE NORM MEANS FOR MALES ON THE STUDY OF VALUES INVENTORY

Value	Named Males Mean	Norm Males Mean	Named Males Standard Deviation
1. Theoretical	44.74*	43.75	7.71
2. Economic	35.15	42.78**	9.66
3. Aesthetic	41.75**	35.09	9.89
4. Social	38.06	37.09	7.77
5. Political	40.25	42.94**	6.85
6. Religious	39.28	38.20	10.79
N = 206			

\*Significantly larger than the corresponding named female mean at the .01 level of confidence. (See Table 29)

\*\*Significantly larger than the corresponding comparative group mean at the .01 level of confidence.

It can be seen in Table 28 that the mean scores for the males in the named population ranged from 35.15 to 44.74. Therefore, according to the Study of Values' normative sample ranges, all of these scores fell within the average range of scores for male college students. When these means for the named males were compared with the means of the normative male sample, however, the resulting t-scores showed significant differences on three of the scales. On the Economic variable the mean score of the male norm group was significantly higher; this difference tended to indicate that the named males might have been less inclined than other college men to conform to the pragmatic or practical businessman-type which this variable characterizes (3:4).

On the Aesthetic variable the mean for the named males was 41.75 which was shown by the t-ratio to be significantly higher than the 35.09 mean of the male norm group. This difference seemed to indicate that these named males enjoyed the more pleasant and beautiful things of life, moreso than the men in the normative group (3:4).

Another significant difference between means was found on the Political value where the mean of 42.94 of the male norm group was 2.68 points higher than the mean of 40.25 of the named male students. This lower mean of the named group indicated that these students placed a somewhat lesser value on personal power and competition than the male norm group (3:5).

In order to determine if significant differences occurred between the males and females in the named population, t-ratios were computed on the means of each sex group. Table 28 shows that on the Theoretical value the named male mean of 44.74 was significantly higher than the corresponding named female mean. Therefore, it was believed that the named males placed a higher value on empirical and cognitive attitudes than the named female students (3:4).

4. Table 29 shows the means and standard deviations on the Study of Values for the named female students and also the means for the female normative population.

**TABLE 29. MEANS AND STANDARD DEVIATIONS OF THE NAMED FEMALE STUDENTS AND THE NORM MEANS FOR FEMALES ON THE STUDY OF VALUES INVENTORY**

Value	Named Females Mean	Norm. Female Mean	Named Females Standard Deviation
1. Theoretical	39.60**	35.75	7.94
2. Economic	33.56	37.87**	7.36
3. Aesthetic	45.36** <sup>*</sup>	42.67	9.18
4. Social	41.11*	42.03	6.66
5. Political	38.67	37.84	6.67
6. Religious	41.06	43.81**	10.40
N = 104			

\* Significantly larger than the corresponding named male mean at the .01 level of confidence. (see Table 28)

\*\*Significantly larger than the corresponding comparative group at the .01 level of confidence.

According to Table 29 the range of means for the named female students extended from 33.56 to 45.36 points. The highest mean score obtained by these students was on the Aesthetic variable; and when this mean of 45.36 was compared to the corresponding mean of the female norm group it was found to be significantly higher at the .01 level of confidence. Because of this significant difference it was assumed that the named females placed a higher value on beauty and the aesthetic things of life than the norm group of females (3:4).

Significant differences between means of the named and the normative female populations were also found on three other values. On the Theoretical value the named female mean of 39.60

was significantly higher than the corresponding female norm mean of 35.75. Thus, it was believed that the named females valued empirical and cognitive attitudes more so than the normative group of females (3:4).

The Economic value mean of 37.87 for the female norm group proved to be significantly higher than the named female mean of 33.56. This significant mean difference indicated that the named females were less inclined to value a practical or pragmatic approach to the affairs of life than the females in the normative sample (3:4).

The 43.81 point mean of the female normative group on the Religious value was also significantly higher than the 41.06 mean of the named female group. Consequently, it was believed that the named females placed a lesser value on the religious or mystical experiences of life than the normative group females (3:5).

When the means of the named female students were compared with the mean scores of the named male students significant differences were found on two of the variables. The females obtained significantly higher means on the Aesthetic and Social values. The Aesthetic value mean of 45.36 for the females was 3.61 points higher than the mean score of 41.75 for the male students, and it was believed that the females tended to value the aesthetic and finer things of life more so than the male students (3:4).

On the Social value the named female mean score of 41.11 points was 3.05 points higher than the named male students'

mean of 38.06. Because of this significant difference it seemed that the female students placed a higher value on love of people and altruistic feelings than the named male students (3:5).

Summary of Personality Inventories. For the named males and females mean scores on the EPPS were converted to percentiles and interpreted comparatively with the normative sex groups; also, the t-ratio was used to determine significant differences between the means of the named males and females on each of the 15 variables.

1. When the mean scores for the named males were converted to percentiles it was found that only two of the 15 scores exceeded the 60th percentile. The mean score of 16.931 on the Achievement variable fell at the 66th percentile and the mean score of 14.167 on the Endurance variable fell at the 64th percentile. At the lowest end of the percentile range it was found that the two mean scores of 16.680 for Dominance and 16.670 for Heterosexuality both fell at the 45th percentile.

When the t-ratio was used to test for significant differences between the means of the male and female scores it was revealed that the males scored significantly higher than the females on the Achievement, Dominance, Endurance, and Agression variables.

2. Three mean scores of the named females exceeded the 60th percentile on the EPPS. On the Autonomy variable the mean score of 14.792 fell at the 77th percentile and the



mean score of 14.683 on the Achievement variable fell at the 72nd percentile. The third mean score of 18.99 on Intraception fell at the 66th percentile. At the lowest end of the percentile range the mean score of 13.446 on the Abasement variable fell at the 37th percentile.

Results of the t-ratios between the named male and female mean scores showed that the females scored significantly higher on the Affiliation, Intraception, Succorance, Abasement, Nurturance, and Change variables.

3. On the Study of Values Inventory the t-ratios showed that the named males scored significantly higher than the norm group males on one of the scales, and the norm group was significantly higher on two of the scales. The named males obtained a significantly higher mean than the norm group males on the Aesthetic value; but the norm group males had significantly higher means on the Economic and Political Scales.

When the t-ratio was used to compare the means of the named males and the named females it was found that the named males scored significantly higher on the Theoretical value.

4. The mean scores of the named females were significantly higher than the mean scores of the norm group females on the Theoretical and Aesthetic values. The norm group females, however, were shown to have significantly higher means than the named females on the Economic and Religious values. When the t-ratio was used to test the difference between the

means of the named females and the named males it was found that the named females scored significantly higher on the Aesthetic and Social values.

Personal interview responses. Of the 572 American students who were named as friends by foreign students 554 were personally interviewed for the Study, and the responses to each interview question were tabulated by frequencies and percentages. Since each interview contained 25 questions these questions were grouped into six broad categories for analysis. These categories were:

1. Cross-cultural patterns of friendship
2. American students' perceptions of foreign students
3. Extent of foreign students' influence on American students
4. American students' perceptions of other Americans' attitudes
5. American students' attitudes toward financial aid for foreign students
6. American students' opinions about foreign students' housing and personal difficulties

Where it was feasible on certain questions the percentages were presented for each response but on other questions, due to the large number of items, the percentages were reported only for the total number of responses within subgroups of the main categories.

1. Cross-cultural patterns of friendship. In order to ascertain the origin and development of cross-cultural friendships the American students were asked the following questions:

- a. How did you first meet this foreign student friend?
- b. Where do you usually get together?
- c. What interests do you have in common with foreign students?
- d. Have you made friends with other foreign students?
- e. Are they from other countries of the world?
- f. Did you know other foreign people before you came to Indiana University?
- g. Where did you know them?
- h. Have you conversed with foreign students in any language other than English?
- i. What languages?

The interviews were prefaced with a statement which provided a frame of reference for the questions in this first major category. This statement was as follows:

"I think it will be easier if you start by thinking of one foreign student that you know fairly well. We don't want his name but for general identification could you tell me what country he comes from? \_\_\_\_\_; and where he lives in Bloomington? \_\_\_\_\_  
Now, could you give me a brief history of your acquaintance?"

a. The first question of the interview concerned the origin of the friendships and the responses to the question, "How did you first meet this foreign student friend?" are presented in Table 30.

TABLE 30. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "WHERE DID YOU FIRST MEET THIS FOREIGN STUDENT FRIEND?"

First meeting	Number	Per cent*
1. <u>Social contacts</u>		
mutual acquaintance	111	
self-introduction by		
American student	51	
accidental meeting	34	
self-introduction by		
foreign student	10	
someone else's home	9	
private party	9	
sports area	7	
in transit	3	
campus hangout	2	
abroad	2	
dating	0	
	<u>238</u>	35
2. <u>Academic areas</u>		
class	124	
laboratory	23	
department seminar	30	
library	3	
	<u>180</u>	27
3. <u>Living arrangements</u>		
residence hall lounge	56	
residence hall dining room	48	
American student's room	45	
foreign student's room	29	
	<u>178</u>	26
4. <u>Organized activities</u>		
Cosmopolitan Club	8	
YMCA and YWCA	2	
Student Union	2	
National clubs	1	
	<u>13</u>	2
5. <u>Church</u>	9	1
6. <u>Other responses</u>	53	9
<b>Total</b>	<b>671</b>	<b>100</b>
*Per cent rounded to nearest whole number		

Table 30 shows that the responses to the question, "Where did you first meet this foreign student friend," were grouped into six major categories and that there was a total of 671 responses. Therefore, 117 of the 554 students offered more than one response to this question. It was found that some of the students qualified their responses to include more than one answer--such as, "I introduced myself in the dining room"--and therefore both responses were recorded. (i.e., 1. self introduction by American student, and 2. residence hall dining room)

The largest category of responses was titled "Social contacts" and Table 30 shows that 238, or 35 per cent, of the Americans met their foreign student friends in some type of social context. Within this category of social contacts it was found that 111 of the 238 responses indicated that the American student had met his foreign student friend through a mutual acquaintance.

In the second largest response category it was found that 180, or 27 per cent, of the American students met foreign student friends in some type of activity related to their academic interests. Most of the responses in this category indicated that the American students met their friends because of being in the same class together.

The category titled "Living arrangements" accounted for 178, or 26 per cent, of the initial contacts. This category encompassed areas within the residence halls or housing accommodations and it showed that the largest number of introductions occurred in the residence hall lounges.

Organized campus activities accounted for only 13, or 2 per cent, of the first meetings between foreign and American students. The largest number within this category was the eight contacts made at the Cosmopolitan Club which is the foreign student activity center provided by the University.

The smallest number of students, 9, or one per cent, first met at church services or church related activities; and 53 of the responses which could not be specifically classified were included under the "other responses" category.

b. The follow-up question on the initial contact with foreign students was the question, "Where do you usually get together with this friend?" The responses to this question are shown in Table 31.



TABLE 31. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "WHERE DO YOU USUALLY GET TOGETHER WITH THIS FRIEND?"

Situation	Number	Per cent*
1. <u>Living arrangements</u>		
American student's room	290	
foreign student's room	257	
residence hall dining room	191	
residence hall lounge	102	
	<u>840</u>	48
2. <u>Social contacts</u>		
campus hangout	144	
private party	77	
between classes	56	
someone else's home	48	
sports area	37	
accidental meeting	11	
mutual acquaintances	9	
dating	9	
	<u>391</u>	23
3. <u>Academic area</u>		
class	126	
department seminar	56	
library	52	
laboratory	35	
	<u>269</u>	15
4. <u>Organized activities</u>		
Cosmopolitan Club	36	
Student Union	36	
National clubs	15	
YMCA and YWCA	0	
	<u>87</u>	5
5. <u>Church</u>	30	2
6. <u>Miscellaneous responses</u>	127	7
Total	1744	100
*Per cent rounded to nearest whole number		

As seen in Table 31 the responses to this second question were grouped into six main categories. A total of 1744 responses, or over three per student, were recorded and the largest single category was that of "living arrangements." There were 840, or 48 per cent, of the responses in this category; and of these 840 responses 290 indicated that the foreign students visited in the American students' rooms, while 257 responses were listed for the foreign students' rooms.

Social contacts accounted for 391, or 23 per cent, of the ways in which foreign and American students pass the time together. In this category 144 of the responses indicated that the students got together most frequently at the campus hangouts.

The time spent together in academic areas accounted for 269, or 15 per cent, of the responses; and again, as in the initial contact situations, being in class together was the most frequent answer to where foreign and American students got together.

The organized activities on campus were mentioned in 87, or five per cent, of the total responses; and church activities were given in only 30, or two per cent, of the total number of answers. Also, responses which were not classified accounted for 127, or seven per cent, of the 1744 responses.

In interpreting the information regarding where foreign students and their friends met and got together, the comparative population was restricted to those who lived in GRC and therefore one would expect the living arrangements to be

emphasized more than in the total main population which included people living in a wide variety of places and therefore meeting in a great variety of locations.

c. The third question in this series of items pertaining to cross-cultural friendship was "What interests do you have in common with foreign students?" Table 32 gives the frequencies and percentages of responses to this question.

TABLE 32. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "WHAT INTERESTS DO YOU HAVE IN COMMON WITH FOREIGN STUDENTS?"

Interests	Number	Per cent*
Academic	294	23
His country	215	17
Social	187	14
Cultural	186	14
People in general	124	10
U.S.A.	109	9
Athletic	66	5
Other countries	54	4
Church	41	3
Campus events	6	1
Total	1282	100
*Per cent rounded to nearest whole number		

In Table 32 there are ten different interests which the American students had in common with foreign students and since more than one interest was listed by most students the responses total 1282.

The most common interest, which was given in 294, or 23 per cent, of the responses, was that involving academic

areas. The second most common response was an interest in his country (the foreign student's) and this was mentioned 215 times, or as 17 per cent, of the total responses. Social and cultural interests each accounted for 14 per cent of the total responses and interest in people in general was given in 124, or ten per cent, of the responses.

A common interest in religion or church accounted for only 41, or three per cent, of the responses and the least area of interest, mentioned only six times, was campus events.

d. In order to determine the extent to which the named American students have sought friendship with more than one particular foreign student, the question was asked, "Have you made friends with other foreign students?" The responses to this question are given in Table 33.

TABLE 33. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "HAVE YOU MADE FRIENDS WITH OTHER FOREIGN STUDENTS?"

Response	Number	Per cent*
Yes	492	89
No	62	11
Total	554	100
*Per cent rounded to nearest whole number		

According to Table 33, 492, or 89 per cent, or the named American student friends had made friends with other foreign students. Thus, only 62, or 11 per cent, had not enlarged their sphere of friendship with other foreign students.

e. As a follow-up question on friendship with other foreign students the students who answered affirmatively were then asked, "Are these friends from other countries?" (other than the country of the first friend mentioned) Table 34 shows the responses of the 492 American students who had made other friends.

TABLE 34. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "ARE THESE OTHER FRIENDS FROM OTHER COUNTRIES?"

Response	Number	Per cent*
Same country	21	4
Other countries in same region	75	15
Other region	187	38
More than one region	209	43
Total	492	100
*Per cent rounded to nearest whole number		

The responses to the question on the origin of other friends were classified according to the country (or countries) mentioned and also according to the region of the world. Table 34 shows that 209, or 43 per cent, of the American students had made other foreign student friends from more than one region of the world. Also, 187, or 38 per cent, of the Americans had made friends with foreign students who came from a different region of the world than the first friend mentioned.

f. Another area of information about the American students' friendships with foreign students concerned their prior experiences with foreign people. Therefore, the question was asked, "Did you know any foreign people before you came to Indiana University?" The responses to this question are presented in Table 35.

TABLE 35. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "DID YOU KNOW ANY FOREIGN PEOPLE BEFORE YOU CAME TO INDIANA UNIVERSITY?"

Response	Number	Per cent*
Yes	453	82
No	101	18
Total	554	100
*Per cent rounded to nearest whole number		

In Table 35 it can be seen that 453, or 82 per cent, of the 554 American students had know foreign people before they came to Indiana University. Only 101, or 18 per cent, had not previously know any foreigners.

g. This question of having previously know foreign people was followed with the question, "Where did you know them?" Table 36 presents the frequencies and percentages of responses to this question.



**TABLE 36. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "WHERE DID YOU KNOW THESE OTHER FOREIGN PEOPLE?"**

Response	Number	Per cent*
Other schools	294	40
Home community	199	27
Traveling	99	14
Lived overseas	89	12
Family	16	2
Other answers	40	5
<b>Total</b>	<b>737</b>	<b>100</b>
*Per cent rounded to nearest whole number		

Most of the American students, according to Table 36, had known foreign people in other schools, and since the 737 responses exceeded the 554 students in the population it was found that some of the students had more than one prior experience with foreigners. Of the 737 responses, 294, or 40 per cent, indicated that the American students had know foreign students in other schools; and 199, or 27 per cent, of the responses revealed that the experiences had been gained in home communities. Experiences while traveling and living overseas accounted for 14 and 12 per cent of the responses, while only 16, or two per cent, or the students had known foreign students through their own families.

h. It was believed that the ability to speak in a foreign language might have some influence on the extent

to which American students became friends with foreign students and therefore they were asked, "Have you conversed with foreign students in any language other than English?" The responses to this question are shown in Table 37..

**TABLE 37. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "HAVE YOU CONVERSED WITH FOREIGN STUDENTS IN ANY LANGUAGE OTHER THAN ENGLISH?"**

Response	Number	Per cent*
Yes	182	33
No	272	49
A little	100	18
Total	554	100
*Per cent rounded to nearest whole number		

In Table 37 it can be seen that 182, or 33 per cent, of the friends had conversed with foreign students in a language other than English. Also, 100, or 18 per cent, revealed that they had conversed "a little" in another language. Thus, 272, or 49 per cent, of the students had not conversed at all in another language.

i. A further question concerning languages was, "What other languages have you spoken?" The responses to this question are shown in Table 38.

**TABLE 38. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "WHAT OTHER LANGUAGES HAVE YOU SPOKEN?"**

Response	Number	Per cent*
Foreign student's language	143	50
French or Spanish	70	25
Other languages	69	25
Total	282	100
*Per cent rounded to nearest whole number		

Of the 282 American students who had conversed with foreign students in a language other than English, 143, or 50 per cent, had spoken in the foreign students' language. Only 70, or 25 per cent, had used French or Spanish; and 69, or 25 per cent, used a language which was familiar to both the American and the foreign student.

Summary of cross-cultural patterns of friendship. In an attempt to determine the origin and development of cross-cultural friendships the friends of foreign students were asked nine questions. It was found that the largest number of American students, 238, or 35 per cent, had met their foreign student friends in social settings, and the second largest number, 180, or 27 per cent, had met them through academic interests. Organized campus activities accounted for only 13, or two per cent, of the initial contacts, and the smallest number of students nine, or one percent, met at church related activities.

Almost half of the American students' responses to the question on where they usually get together with foreign students showed that most of the interaction occurred in the residence halls or housing units, and only 23 per cent of the responses referred to social and spontaneous activities.

In terms of the interests shared in common with foreign students it was found that the most numerous responses occurred in the academic area. The named students also shared a strong common interest in the home countries of their foreign student friends, as well as various social and cultural interests.

Almost 90 per cent of the American students had made friends with more than one foreign student and most of these friends came from several different regions of the world.

It was also found that 453, or 82 per cent, of the named students had known foreign people before they came to Indiana University. Most of these 453 students had known foreign people at other schools and in their home communities; but only a small percentage had known any through their families.

When asked about their conversations with foreign students in a language other than English, 282, or 51 per cent, of the named friends indicated that they had conversed in a foreign language, and of these 282 students, 143, or 50 per cent, said that they had conversed with their foreign student friend in his own language.

## 2. American students' perceptions of foreign students.

An important aspect of this study focused on the attitudes and

opinions that the American students held about the foreign students. More specifically, the concern centered upon the American students' perceptions of how the foreign students differed most from American students. Also, American students' opinions were sought in regard to how well the foreign students really get to know Americans, and in regard to what the foreign students really think about Americans in general.

a. The American students' perceptions of foreign students were obtained by asking the open-ended question, "How would you say they differ most from American students?" Because of the fact that this question was open-ended, students responded with a variety of opinions and impressions of the foreign students. Therefore, the responses to this question were grouped into four major categories: (a) socially, (b) culturally, (c) intellectually, and (d) in age and maturity. Most of the responses to this question indicated that the foreign students differed in some degree (had more or less of a trait than American students), or that they had different attributes from American students. For example, in reference to religion, (which was included in the cultural category) it was possible to obtain responses indicating that foreign students were: (a) more religious than American students, (b) not as religious as American students, or (c) had religious beliefs that were different from American students. Because of these differentiated responses the categories were coded in terms of being: (a) more, (b) less, or (c) different.

Table 39 shows the responses to how American students thought foreign students differed from American students.

**TABLE 39. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "HOW DO FOREIGN STUDENTS DIFFER FROM AMERICAN STUDENTS SOCIALLY?"**

Response	Number	Per cent*
More social	168	21
Less social	131	16
Different socially	501	63
Total	800	100
*Per cent rounded to nearest whole number		

Table 39 shows that the 554 American students gave 800 responses to the question on how they thought foreign students differed from American students socially. Of these 800 responses, 168, or 21 per cent, indicated that foreign students were more social than American students; and 131, or 16 per cent, referred to ways in which foreign students were less social. The largest number of responses, however, indicated that foreign students had social attributes which were different from American students.

In the second major category of responses to the question on how foreign students differ from American students there were 242 responses referring to cultural differences. These cultural responses are shown in Table 40.



**TABLE 40. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, 'HOW DO FOREIGN STUDENTS DIFFER FROM MOST AMERICAN STUDENTS CULTURALLY?'**

Response	Number	Per Cent*
More cultural	147	61
Less cultural	13	5
Different culturally	82	34
Total	242	100
*Per cent rounded to nearest whole number		

Of the 242 responses referring to cultural differences, Table 40 shows that 147, or 61 per cent, indicated that foreign students were more cultural than American students. Only 13, or five per cent, of the responses referred to the foreign students as being less cultural; and 82, or 34 per cent, ascribed culturally different attributes to the foreign students.

The third major category of responses pertained to the intellectual attributes of the foreign students and these responses are shown in Table 41.

**TABLE 41. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "HOW DO FOREIGN STUDENTS DIFFER FROM MOST AMERICAN STUDENTS INTELLECTUALLY?"**

Response	Number	Per cent*
More intellectual	238	83
Less intellectual	22	8
Different intellectually	27	9
Total	287	100
*Per cent rounded to nearest whole number		

According to Table 41 there were 287 replies differentiating the intellectual characteristics of foreign students in comparison with American students. The greatest number, 238, or 83 per cent, stated that foreign students were in various ways more intellectual than American students. On the other hand, only 22, or eight per cent, of the responses referred to the foreign students as being less intellectual than Americans; and 27, or nine per cent, indicated that foreign students were different intellectually from American students.

The fourth and final category of responses concerning foreign and American student differences was that of age and maturity. Responses in this category included such statements as "Most foreign students I know are much older than American students," or "A lot of foreign students here at I.U. are rather immature and dependent on other people." Table 42 presents the total number of responses to this category.

**TABLE 42. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "HOW DO FOREIGN STUDENTS DIFFER FROM MOST AMERICAN STUDENTS IN AGE AND MATURITY?"**

Response	Number	Per cent*
Older and more mature	394	90
Younger and less mature	22	5
Different in age and maturity	21	5
Total	437	100
*Per cent rounded to nearest whole number		

It can be seen in Table 42 that 394, or 90 per cent, of the 437 responses in the age and maturity category indicated that foreign students were older and more mature than American students. The remaining ten per cent of the responses were almost equally divided between the two opinions that foreign students were younger and less mature than Americans and that they were different in age and maturity from most American students.

b. The second major question in this series concerning the American students' perceptions of foreign students was, "Do you think foreign students really get to know Americans?" Table 43 shows the frequencies and percentages of responses to this question.

TABLE 43. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "DO YOU THINK FOREIGN STUDENTS REALLY GET TO KNOW AMERICANS?"

Response	Number	Per cent*
Yes	126	23
No	121	22
Incompletely	69	12
Some do and Some don't	223	40
Do not know	15	3
Total	554	100
*Per cent rounded to nearest whole number		

For the question pertaining to how well foreign students get to know Americans the responses, as shown in Table 43, were classified into five major categories. Of the 554 responses, 126, or 23 per cent, indicated that foreign students really do get to know Americans; and 121, or 22 per cent, felt that foreign students do not get to know Americans. Sixty-nine, or 12 per cent, of the students reported that foreign students only get to know Americans incompletely. The largest number of responses, 223, or 40 per cent, maintained that some foreign students get to know us and some do not get to know us. Only 15, or three per cent, indicated that they did not know if foreign students really do get to know Americans.

c. It was believed that the American students' opinions or perceptions about foreign students' attitudes toward Americans

might indicate an important area for further research. Therefore, the question was asked, "What do foreign students think of Americans?" The responses to this question are shown in Table 44.

TABLE 44. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "WHAT DO FOREIGN STUDENTS THINK OF AMERICANS?"

Response	Number	Per cent*
Like	281	51
Indifferent	16	3
Dislike	30	6
Some like - Some dislike	134	24
Do not let us know	43	7
Other answer	50	9
Total	554	100
*Per cent rounded to nearest whole number		

Table 44 shows that the responses were grouped into six main categories for the question on American students' perceptions of foreign students. The largest number of students, 281, or 51 per cent, indicated that foreign students like Americans. In the second largest category, 134, or 24 per cent, of the students said that some foreign students like us and some dislike us. Only 16, or three per cent, reported a feeling of indifference on the part of the foreign students; and 30, or six per cent, stated that they felt foreign students dislike Americans. Furthermore, 43, or

seven per cent, indicated that foreign students do not let us know their feelings; and 50, or nine per cent, of the American students gave responses which were not classified into any one category.

Summary of American students' perceptions of foreign students. In order to ascertain the American students' perceptions of foreign students three major questions were asked. The first question, however, resulted in four categories which reflected the American students' perceptions of how foreign students differed from American students. These four categories concerned differences in social, cultural, intellectual, and maturity attributes of the foreign students.

It was found that the majority, or 63 per cent, of American students' responses characterized the foreign students as being different socially from American students but not necessarily having more or less in degrees of social characteristics.

In terms of cultural attributes, 61 per cent of the the American students' responses indicated that foreign students were more cultural than American students; and furthermore, 83 per cent of the responses showed that the American students thought foreign students were more intellectual than American students.

The largest number of responses in reference to age and maturity attributes of foreign students showed that 90 per cent of the Americans thought foreign students were older and more mature than American students.



On the question "Do you think foreign students really get to know Americans?", 23 per cent of the named students replied "yes," and 22 per cent said "no." The greatest number of students, or 40 per cent indicated that some foreign students do get to know Americans and some do not get to know us.

When the American students were asked to express their opinions on what foreign students think of Americans, the majority of students, or 41 per cent, indicated that foreign students like Americans. Furthermore, only six per cent said that foreign students dislike Americans, and 24 per cent of the named students felt that some of the foreign students like Americans and some dislike Americans.

3. Extent of foreign students' influence on American students. An attempt was made to determine in what ways and to what extent the American students had been affected by their association with foreign students. It was believed that any effect of the foreign students would manifest itself in at least three areas of the American student lives. Therefore, three questions were asked which elicit responses in these areas. These questions pertained to the American students' interests, to their attitudes on national and international affairs, and to their plans for the future.

a. The responses are presented in Table 45 for the question, "Have you developed any new interests because of having known foreign students?"

**TABLE 45. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "HAVE YOU DEVELOPED ANY NEW INTERESTS BECAUSE OF HAVING KNOWN FOREIGN STUDENTS?"**

<b>Interests</b>	<b>Number</b>	<b>Per cent**</b>
Broadened generally	286	30
Culture	171	18
Government and Politics	139	14
Foreign affairs	102	11
Geography	70	7
Language	49	5
Economics	21	2
Others	128	13
<b>Total</b>	<b>966</b>	<b>100</b>
*Per cent rounded to nearest whole number		

The 554 American students enumerated 966 new interests, according to Table 45, that they had gained because of having known foreign students. The largest category of responses, titled "broadened generally", pertained to an awareness of numerous new outlooks or interests and there were 286, or 30 per cent, of the total answers in this group. New interests in culture was the second highest in frequency and this was given in 171, or 18 per cent, of the responses; while government and politics accounted for 139, or 14 per cent, of the total responses. The fourth largest category mentioned by the students was foreign affairs, and there were 102, or 11 per cent, of the total responses in this category.

Geography, languages, and economics were listed as new interests in 14 per cent of the responses; and 128, or 13 per cent, of the remaining responses were so scattered that they were included in the "other response" category.

b. Any change that might have occurred in the American students' attitudes was considered to be a fairly reliable indication of the foreign students influence and therefore the question was asked, "Has knowing foreign students changed your attitude on any question at home or abroad?" The responses to this question are presented in Table 46.

TABLE 46. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "HAS KNOWING FOREIGN STUDENTS CHANGED YOUR ATTITUDE ON ANY QUESTION AT HOME OR ABROAD?"

Attitudes	Number	Per cent*
Foreign Affairs	108	16
Foreigners	107	16
U.S. Policies	101	15
Foreign cultures	75	11
Foreign countries	73	10
U.S. Values	71	10
Religion	28	4
Race	27	4
Other	98	14
Total	688	100
*Per cent rounded to nearest whole number		

Table 46 shows that the 554 named students listed 688 changes in their attitudes toward national and international situations. The two most notable changes in attitudes occurred on foreign affairs and foreigners. On each of these two items 108, or 16 per cent, of the students indicated that they had modified their attitudes to some extent. Also, 101, or 15 per cent, of the responses showed that the American students had changed their attitudes toward United States policies at home and abroad.

A change in attitudes toward foreign cultures was given in 75, or 11 per cent, of the total responses; and the modification of ideas concerning foreign countries was mentioned in 73, or 10 per cent, of the responses. Furthermore, 71, or 10 per cent, of the responses showed that the American students had modified their attitudes toward common United States values.

Some modification of attitudes on religion and race was evident in that each of these categories received four per cent of the responses.

c. The third question in this series pertaining to the influence of foreign students on American students was, "Have you changed any of your plans for the future because of having known foreign students?" Table 47 shows the frequencies and percentages of responses to this question.

**TABLE 47. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "HAVE YOU CHANGED ANY OF YOUR PLANS FOR THE FUTURE BECAUSE OF HAVING KNOWN FOREIGN STUDENTS?"**

Response	Number	Per cent*
Travel abroad	169	42
Study abroad	58	14
Vocations	47	12
Learn new languages	45	11
New courses	30	7
Peace Corps	16	4
Other plans	41	10
Total	406	100
*Per cent rounded to nearest whole number		

It can be seen in Table 47 that 406 of the 554 American students indicated they had changed their plans for the future because of having known foreign students. Travel abroad was by far the most frequent change mentioned and 169, or 42 per cent, of the 406 students were in this category. Also, 58, or 14 per cent, of the students said they planned to study abroad because of the influence of the foreign students.

New jobs or vocations were given as responses by the third largest number of students and 47, or 12 per cent, indicated a change in future vocations.

A desire to learn new languages was instilled in 45, or 11 per cent, of the American students and 30, or seven per cent, more revealed that they were influenced enough to want to take new academic courses.

The Peace Corps was to be sought in the future by 16, or four per cent, of the American students as a result of their having known foreign students; and the remaining 41, or 10 per cent, of the students listed a variety of different plans for the future.

Summary of foreign students' influence on American students. In order to determine the extent and type of foreign student influence on American students three questions were asked. These three questions pertained to the new interests acquired by the American students, to the modification of their attitudes on national and international situations, and to changes in their future plans.

It was found that 30 per cent of the American students' responses indicated a general broadening of their interests because of foreign student influence. Furthermore, new interests in culture, government, and foreign affairs were reflected in 43 per cent of the total number of responses.

The influence of foreign students was also evident in the answers to the question, "Has knowing foreign students changed your attitude on any question at home or abroad?" On this question a total of 47 per cent of the responses showed attitude changes by the American students on foreign affairs, foreigners, and on United States foreign and domestic policies. Other attitude changes were reflected in 31 per cent of the responses on foreign cultures, foreign countries, and United States.



Of the 554 named students, 406 mentioned that they had changed their plans for the future because of having known foreign students. Travel abroad was given as a change in future plans by 169, or 42 per cent, of the students, and 58, or 14 per cent, indicated a new desire to study abroad. Furthermore, 47, or 12 per cent, of the students indicated a change in vocations because of the foreign students' influence.

4. American students' perceptions of other Americans' attitudes. The influence of peer group pressure was thought to be an important factor in the attitudes of the American friends of foreign students and therefore an effort was made to determine how these friends perceived the attitudes of other Americans toward foreign students. The students were asked, "How do other Americans react to American students associating with foreign students?" Because of the open-ended nature of this question the students tended to respond in terms of (a) friendship in general with foreign students, and (b) a dating relationship with foreign students.

a. The responses referring to friendship in general with foreign students are presented in Table 48.

**TABLE 48. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "HOW DO OTHER AMERICANS REACT TO AMERICAN STUDENTS' FRIENDSHIPS WITH FOREIGN STUDENTS?"**

Response	Number	Per cent*
Favorably	247	45
Indifferently	213	38
Unfavorably	33	6
No opinion	61	11
Total	554	100
*Per cent rounded to nearest whole number		

Table 48 shows that 247, or 45 per cent, of the American students perceived other Americans as viewing friendships with foreign students favorably. Another 213, or 38 per cent, of the students felt that other Americans were indifferent to American students' friendships with foreign students; and only 33, or six per cent, indicated that other Americans were unfavorable toward their friendships with foreign students.

The remaining 61, or 11 per cent, of the named friends had no opinion about other Americans' attitudes toward friendships with foreign students.

b. The responses of the students in regard to how other Americans reacted to dating relationships with foreign students are presented in Table 49.

**TABLE 49. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, 'HOW DO OTHER AMERICANS REACT TO AMERICAN STUDENTS' DATING RELATIONSHIPS WITH FOREIGN STUDENTS?'**

Response	Number	Per cent*
Favorably	56	10
Indifferently	68	12
Unfavorably	111	20
No opinion	319	58
Total	554	100
*Per cent rounded to nearest whole number		

It can be seen in Table 49 that 56, or ten per cent, of the American students perceived other Americans' attitudes toward a dating relationship with foreign students as favorable. There were 68, or 12 per cent, of the responses indicating that other Americans were indifferent to the cross-cultural dating relationship; but, 111, or 20 per cent, of the American students thought other Americans reacted unfavorably to foreign and American student dating.

It was also found that most of the students, 319, or 58 per cent, offered no opinion as to how other Americans felt about cross-cultural dating.

Summary of American students' perceptions of other Americans attitudes. In response to the open-ended question, "How do other Americans react to American students associating with foreign students?", the named students referred to

(a) friendship in general with foreign students, and (b) a dating relationship.

The largest number of students, 247, or 45 per cent, felt that other Americans had favorable attitudes toward their friendships with foreign students; and only 33, or six per cent, of the named students perceived other Americans' attitudes as being unfavorable to cross-cultural friendships.

In terms of the dating relationship, however, only 56, or ten per cent, of the named friends perceived other Americans as being favorable. Also, 111, or 20 per cent, of the named students felt that other Americans had unfavorable attitudes toward cross-cultural dating.

5. American students' attitudes toward financial aid for foreign students. In the interview with each named student two questions were asked concerning financial aid for foreign students. The first question dealt with federal government aid, and the second question concerned financial aid through a state-supported university.

a. The responses are presented in Table 50 for the question, "Do you think the federal government should give financial support to foreign students?"

**TABLE 50. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "DO YOU THINK THE FEDERAL GOVERNMENT SHOULD GIVE FINANCIAL SUPPORT TO FOREIGN STUDENTS?"**

Response	Number	Per cent*
Approve	417	75
Indifferent	34	6
Disapprove	87	16
No Opinion	16	3
Total	554	100
*Per cent rounded to nearest whole number		

According to Table 50 there were 417, or 75 per cent, of the students in the named group who approved of government aid to foreign students. On the other hand, 87, or 16 per cent, of the students indicated that they disapproved of federal support for the foreign students; and 34, or six per cent, said that they were indifferent to the matter.

Of the 554 students, 16, or three per cent, offered no opinion whatsoever on this question.

b. The second question asked, "Do you think Indiana University, a state-supported university, should give financial aid to foreign students?"; and the responses to this question are given in Table 51.

**TABLE 51. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "DO YOU THINK INDIANA UNIVERSITY, A STATE-SUPPORTED UNIVERSITY, SHOULD GIVE FINANCIAL AID TO FOREIGN STUDENTS?"**

Response	Number	Per cent*
Approve	402	73
Indifferent	31	5
Disapprove	100	18
No Opinion	21	4
Total	554	100
*Per cent rounded to nearest whole number		

Table 51 shows that 402, or 73 per cent, of the named group approved of Indiana University providing financial aid to foreign students. Only 100, or 18 per cent, of the students indicated that they disapproved of giving them financial aid, and 31, or five per cent, were indifferent to the idea.

There were 21, or four per cent, of the students who had no opinion on this question.

Summary of American students' attitudes toward financial aid for foreign students. The named students were asked two questions concerning their opinions on providing financial aid to foreign students through the federal government and through a state-supported university.

It was found that 417, or 75 per cent, of the 554 students favored federal government aid to foreign students; while 87, or 16 per cent, did not favor government aid.



Furthermore, 402, or 73 per cent, of the 554 named students favored financial aid to foreign students through a state-supported university, and only 100, or 18 per cent, did not favor state university financial support of foreign students.

6. American students' opinions about foreign students' housing and personal difficulties. The last three questions on the interview concerned the American students' opinions of the foreign students' living arrangements, the kinds of difficulties they have, and suggestions for alleviating these difficulties.

a. The first question in this series was, "What do you think of the over-all arrangements for foreign students at Indiana University?" The responses to this question are shown in Table 52.

TABLE 52. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "WHAT DO YOU THINK OF THE OVER-ALL ARRANGEMENTS FOR FOREIGN STUDENTS AT INDIANA UNIVERSITY?"

Response	Number	Per cent*
Good	271	49
Fair	71	13
Poor	30	6
Don't Know	182	32
Total	554	100
*Per cent rounded to nearest whole number		

It can be seen in Table 52 that 271, or 49 per cent, of the American students felt that the over-all housing arrangements were good for foreign students at Indiana University. Also, 71, or 13 per cent, indicated that the arrangements were fair; and 30, or six per cent, rated them as poor. A large number of students, 182 or 32 per cent, maintained that they did not know, or had no opinion about the foreign students' housing arrangements.

b. When the question was asked, "What kind of difficulties do foreign students have?", there were 1173 responses from the 554 students. Table 53 shows the kinds of difficulties and the students' responses to this question.

TABLE 53. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "WHAT KIND OF DIFFICULTIES DO FOREIGN STUDENTS HAVE?"

Difficulty	Number	Per cent*
Loneliness	467	39
Language	381	33
Customs	169	14
Homesickness	66	6
Prejudice	65	6
Fears	25	2
Total	1173	100
*Per cent rounded to nearest whole number		

According to Table 53, loneliness was seen by the named students to be the most common problem of the foreign students, and this was mentioned in 467, or 39 per cent, of the responses. Language was listed as a difficulty in 381, or 33 per cent, of the answers and the third ranked difficulty was American customs which was given in 169, or 14 per cent, of the total answers.

Homesickness and prejudice each accounted for six per cent of the responses and 25, or two per cent, of the responses mentioned fear as a problem or difficulty encountered by foreign students.

c. As a follow-up question to the difficulties encountered by the foreign students, the American students were asked, "What could be done about their difficulties?" The responses to this question are shown in Table 54.

TABLE 54. NUMBER AND PER CENT OF STUDENTS' RESPONSES TO THE QUESTION, "WHAT COULD BE DONE ABOUT THEIR DIFFICULTIES?"

Response	Number	Per cent*
More orientation	212	38
Higher standards	75	14
More counseling	73	13
No opinion	194	35
Total	554	100
*Per cent rounded to nearest whole number		

There were three major responses to the question concerning solutions for the foreign students' problems and difficulties. Table 54 shows that 212, or 38 per cent, of the American students felt more orientation would alleviate many of the difficulties for foreign students. Furthermore, 75, or 14 per cent, indicated that higher academic standards and higher entrance requirements would eliminate many problems before they arise; and 73, or 13 per cent, of the students indicated that more counseling would help foreign students overcome their difficulties.

The remaining 194, or 35 per cent, of the students had no opinion on how to alleviate the foreign students' problems.

Summary of American students' opinions about foreign students' housing and personal difficulties. Each interview with the named friends was concluded with a series of three questions pertaining to the foreign students' housing arrangements, their problems and difficulties, and to ways of solving these difficulties.

When the American students were asked about the overall housing arrangements for foreign students at Indiana University almost one-half, or 49 per cent, expressed the opinion that the facilities were good, and 30, or six per cent, indicated that the arrangements were bad. About one-third, or 32 per cent, of the students failed to express any opinion about the housing arrangements.

In relation to the difficulties encountered by foreign students, it was found that 39 per cent of the American students considered loneliness to be a major problem and 33 per cent indicated that language was a prominent foreign student difficulty. Furthermore, American customs were given by 14 per cent of the named friends as a common foreign student problem.

According to 38 per cent of the named friends more orientation would alleviate many of the foreign student difficulties. Also, 14 per cent of the students felt that higher standards would solve many problems before they arise; and 13 per cent of the named friends favored more counseling as a means of solving the foreign students' difficulties.

## CHAPTER V

## Analysis of Data of the Comparative Populations

One of the main objectives of this study was to compare a group of 148 American students who lived in the Graduate Residence Center and who had been named as friends by foreign students with a similar group of 330 American students who also lived in the Graduate Residence Center but who had not been named as friends by foreign students.

Because of the fact that the students in both groups resided in the Graduate Residence Center there was an equal opportunity for the students in each group to associate and interact with the foreign students who lived in the same Center. It was believed, then, that possible differences in personality or background characteristics might account for some of the students being named as friends of foreign students and others not being named as friends.

The approach to this objective resulted in the formulation of the following two questions:

1. What were the descriptive personality characteristics of those students who were named as friends by foreign students and what were the descriptive personality characteristics of those students who were not named as friends by foreign students?
2. How did the descriptive personality characteristics of the named group of American students compare with the descriptive personality characteristics of the not named group of students?

The detailed objectives derived from the preceding questions were based on the items of data available from three main sources of information: personal data files, personality



inventories scores, and the interview data. Therefore, this aspect of the study attempted to determine if there was a significant difference between the named and not named groups on the following dimensions:

1. the ages of the students
2. the number of males and females
3. the marital status of members
4. the geographical distribution of the students
5. the size of the home towns
6. the national birthplaces (U.S. or foreign) of the fathers and mothers of the students
7. the educational levels of the fathers and mothers of the students
8. the occupational levels of the parents of the students
9. the number of students in terms of participation in high school and college activities
10. the military service experience
11. the fields of study
12. the mean raw scores of the students on each variable of the Edwards Personal Preference Schedule
13. the mean raw scores of the students on each variable of the Study of Values
14. the responses of the students in terms of where they first met a particular foreign student
15. the responses of the students in terms of where they usually get together with foreign students
16. the responses of the students in terms of the interests they have in common with foreign students
17. the number of students who have made friends with other foreign students

18. the responses of the students in terms of the national origin of their other foreign student friends
19. the responses of the students to the question of having known foreign people before coming to Indiana University
20. the responses of the students to the question of where they knew other foreign people before coming to Indiana University
21. the responses of the students to the question of having conversed with foreign students in a language other than English
22. the responses of the students in terms of what other languages they have used in conversing with foreign students
23. the students' response concerning how they think foreign students differ from American students
24. the responses of the students concerning what they think foreign students think of Americans
25. the responses of the students concerning their beliefs about the extent to which foreign students really get to know Americans
26. the responses of the students in terms of the number of new interests which they have developed as a result of having known foreign students
27. the number of students in terms of attitudes which have been modified as a result of having known foreign students
28. the responses of the students in terms of the changes in future plans they have made as a result of having known foreign students
29. the responses of the students in terms of how they think other Americans view friendships with foreign students
30. the responses of the students in terms of how they think other Americans view a dating relationship with foreign students
31. the attitudes of the students toward federal government aid for foreign students

32. the attitudes of the students toward Indiana University giving financial aid to foreign students
33. the responses of the students in terms of what they think of the over-all arrangements for foreign students at Indiana University
34. the responses of the students in terms of what kinds of difficulties they think foreign students have
35. the responses of the students in terms of what they think could be done to alleviate the difficulties encountered by foreign students

The foreign and American student data obtained in this investigation are presented in this chapter in the following manner:

- I. The Graduate Residence Center Foreign Student Population
  - A. Personal and background characteristics
  - B. Attitudes and preferences toward interpersonal and social relationships.
- II. The Graduate Residence Center American Student Population
  - A. Personal data items

1. Age	7. Home state
2. Sex	8. Size of home town
3. Marital Status	9. Birthplace of fathers
4. Field of study	10. Birthplace of mothers
5. Participation in activities	11. Education of fathers
6. Military service experience	12. Education of mothers
	13. Occupation of fathers
	14. Occupation of mothers
  - B. Personality Inventories Scores
    1. Male scores on the Edwards Personal Preference Schedule
    2. Female scores on the Edwards Personal Preference Schedule
    3. Male scores on the Study of Values
    4. Female scores on the Study of Values
  - C. Personal interview responses
    1. Cross-cultural patterns of friendship
    2. American students' perceptions of foreign students
    3. Extent of foreign students' influence on American students
    4. American students' perceptions of other Americans' attitudes
    5. Attitudes toward financial aid for foreign students
    6. Opinions about foreign students' housing and personal difficulties

### The Graduate Residence Center Foreign Student Population

Since the composition of foreign student populations varies from campus to campus, the generalization of the results of this study to other American student populations and to other university campuses was to a great extent dependent upon the characteristics of the GRC foreign student population. Consequently, although the focus of this investigation centered upon the American student populations, the distinctive features of the Graduate Residence Center foreign students must be delineated.

During the Fall of 1963 there were 277 foreign students living in the GRC, and of these 277, 193, or 80 per cent, returned completed questionnaires. Therefore, the characterization of the GRC foreign student population is based upon the responses obtained in these 193 completed questionnaires.

Personal and background characteristics. The average age of the foreign students in GRC was 27.1 years and 126, or 65 per cent, of these students were males and 67, or 35 per cent, were females. Thirty-nine students, or 20 per cent, indicated that they were married and 154, or 80 per cent, were not married.

Home countries were given by 187, or 97 per cent, of the students and a list of these countries appears in Table 55.

TABLE 55. NUMBERS OF GRADUATE RESIDENCE CENTER FOREIGN STUDENTS FROM VARIOUS COUNTRIES

Country	Number of Students	Country	Number of Students
1. Afghanistan	2	36. Nepal	1
2. Argentina	3	37. Nigeria	7
3. Australia	1	38. Pakistan	13
4. Belgium	1	39. Poland	1
5. Bermuda	1	40. Philippines	7
6. Brazil	14	41. Ryukyu Islands	4
7. Burma	1	42. Saudi Arabia	1
8. Canada	7	43. Somali	3
9. Chile	2	44. Southern Rhodesia	1
10. China	4	45. Spain	1
11. Colombia	1	46. Sudan	2
12. Congo	1	47. Sweden	2
13. Denmark	1	48. Switzerland	1
14. El Salvador	1	49. Syria	1
15. England	13	50. Tanganyika	1
16. Ethiopia	1	51. Thailand	16
17. Finland	2	52. Turkey	1
18. France	2	53. Uganda	1
19. Germany	3	54. U.A.R.	2
20. Greece	2	55. U.S.S.R.	1
21. Haiti	1	56. Venezuela	1
22. Hong Kong	1	57. Yugoslavia	1
23. India	9		
24. Indonesia	5		
25. Iran	3	no answer	6
26. Iraq	7		
27. Israel	2		
28. Italy	2		
29. Jamaica	2		
30. Japan	8		
31. Korea	6		
32. Laos	1		
33. Liberia	3		
34. Malaysia	2		
35. Mexico	3		
		Total	193

Table 55 shows that 57 countries were represented in the Graduate Residence Center population during the Fall of 1963. The countries with the largest numbers of students were Thailand, Brazil, England, and Pakistan. In order that the cultural backgrounds and general characteristics of the students as a group might be more adequately defined the distribution of the numbers and percent of the students from areas of the world is shown in Table 56. (A list of the countries in each world area is presented in Appendix J.)

TABLE 56. NUMBER AND PERCENT OF GRADUATE RESIDENCE CENTER FOREIGN STUDENTS FROM AREAS OF THE WORLD

World Area	Number	Per cent*
1. Far East	65	34
2. Europe	34	17
3. Near and Middle East	30	16
4. Latin America	27	14
5. Africa	22	11
6. North America	8	4
7. Oceania	1	1
8. Country not given	6	3
Total	193	100
*Per cent rounded to nearest whole number		



According to Table 56 the largest group of foreign students at the Graduate Residence Center was from the Far East, the second largest group was from Europe, and third greatest number of students was from the Near and Middle East. By combining the first and third groups in Table 56 it was found that Asian students comprised 50 per cent of the Graduate Residence Center foreign student population.

Further information on background characteristics was obtained by asking an optional question on the questionnaire which pertained to religion. Table 57 presents the various religious beliefs of the foreign students.

TABLE 57. NUMBER AND PER CENT OF GRADUATE RESIDENCE CENTER FOREIGN STUDENTS ADHERING TO VARIOUS RELIGIOUS BELIEFS

Religion	Number	Per cent*
1. Catholic	39	21
2. Protestant	38	20
3. Islam	35	18
4. Buddhism	19	10
5. Christianity	11	5
6. Hinduism	3	1
7. Greek Orthodox	1	.5
8. Judaism	1	.5
9. Did not answer	46	24
Total	193	100
*Per cents rounded to nearest whole number where appropriate		

As seen in Table 57, 39, or 21 per cent, of the students indicated that they held the Catholic faith; and 38, or 20 per cent, were Protestant. The third largest religious group was the Islamic with 35, or 18 per cent, of the foreign students in this category. It should be noted that there is an overlap in the breakdown of religions. Catholic, Protestant, and Greek Orthodox are actually included in Christianity. The Greek Orthodox are also Catholics. Table 57 shows the actual responses given by the Graduate Residence Center foreign students.

In regards to previous travel, 28 students, or 14 per cent, indicated that they had been in the United States before and 165, or 86 per cent, stated that this was their first visit. Furthermore, these students had been in the United States an average of 14 months on this visit, and they expected to stay an average of 13.3 months longer. Information on the students' motivations was obtained by asking, "Which one of the following was your major reason for coming to the United States?"; and their responses are shown in Table 58.

**TABLE 58. NUMBER AND PER CENT OF GRADUATE RESIDENCE CENTER FOREIGN STUDENTS GIVING MAJOR REASONS FOR COMING TO THE UNITED STATES**

Major Reason	Number	Per cent*
1. To study in a special field	169	88
2. To live in another country and to get to know the people	10	5
3. To get a general education	6	3
4. Other reasons	8	4
<b>Total</b>	<b>193</b>	<b>100</b>
*Per cent rounded to nearest whole number		

The greatest number of students, 169, or 88 per cent, indicated, according to Table 58 that they came to the United States to study in a special field.

Educationally these students were at various levels of training and Table 59 presents the analysis of the academic degrees sought by the foreign students.

**TABLE 59. NUMBER AND PER CENT OF GRADUATE RESIDENCE CENTER FOREIGN STUDENTS SEEKING ACADEMIC DEGREES**

Academic degree	Number	Per cent*
1. Doctorate	40	21
2. Master's	103	53
3. Bachelor's	7	4
4. Not a degree candidate	40	21
5. Did not answer	3	1
<b>Total</b>	<b>193</b>	<b>100</b>
*Per cent rounded to nearest whole number		

As can be seen in Table 59 over one-half of the Graduate Residence Center foreign students were at the Master's degree level; 40 students were seeking a doctorate and 40 students were enrolled in a special programs that did not lead to an academic degree.

The educational interests of the GRC foreign students spanned a wide range of the academic spectrum and Table 60 shows the major fields in which the students were enrolled.

TABLE 60. NUMBER OF GRADUATE RESIDENCE CENTER FOREIGN STUDENTS MAJORING IN VARIOUS FIELDS OF STUDY

Major field	Numbers	Major field	Numbers
1. Anthropology	1	16. Government	11
2. Asian Studies	1	17. Health, Phys. Ed., and Recreation	4
3. Bacteriology	1	18. History	4
4. Biology	2	19. Home Economics	1
5. Botany	3	20. Journalism	1
6. Business	13	21. Law	1
7. Chemistry	5	22. Linguistics	17
8. Comparative Literature	1	23. Mathematics	2
9. Economics	9	24. Music	9
10. Education	67	25. Nursing	1
11. English	7	26. Optometry	5
12. Folklore	1	27. Physics	7
13. Geography	5	28. Psychology	3
14. Geology	6	29. Slavic Languages	1
15. German	1	30. Sociology	2
		31. Zoology	1

As seen in Table 60 the Graduate Residence Center foreign students were majoring in 31 different academic fields; but the greatest number, 67, or 33 per cent, were majoring in Education. The fields of Linguistics and Business ranked second and third, respectively, in terms of the number of students enrolled in them.

Attitudes and preferences toward interpersonal and social relationships. Three questions were included in the questionnaire in which the students were asked to indicate: (a) approximately what per cent of their free time was spent with American students, (b) what per cent of their free time was spent with people of their own nationality, and (c) what per cent of their free time was spent alone. Table 61 shows the numbers of students and the per cent of their free time that they spent alone and with others.

TABLE 61. NUMBER AND PER CENT OF GRADUATE RESIDENCE CENTER FOREIGN STUDENTS REPORTING PER CENT OF TIME SPENT WITH AMERICAN STUDENTS, OWN NATIONALS, AND ALONE

Per cent of time	American students		Nationals		Alone	
	Number	Per cent*	Number	Per cent*	Number	Per cent*
More than 50	49	25	26	13	27	14
40 to 50	25	13	15	8	21	11
30 to 40	20	10	21	11	24	12
20 to 30	17	9	35	18	39	20
10 to 20	34	17	23	12	35	18
Less than 10	42	22	59	31	36	19
No answer	6	3	14	7	11	6
Total	193	99	193	100	193	100
*Per cent rounded to nearest whole number.						

Forty-nine, or 25 per cent, of the Graduate Residence Center foreign students spent more than half of their free time with American students, according to Table 61; and 42, or 22 per cent, indicated that they spent less than 10 per cent of their free time with American students. Only 26, or 13 per cent, spent more than 50 per cent of their free time with people of their own nationality, and 59, or 31 per cent, said that they spent less than 10 per cent of their free time with their fellow nationals. Twenty-seven, or 14 per cent, of these students spent more than 50 per cent of their free time alone, while 36, or 19 per cent, spent less than 10 per cent of their free time alone.



The foreign students were asked to whom they would go if they were faced with a serious personal problem and the responses to this question are shown in Table 62.

TABLE 62. NUMBER AND PER CENT OF GRADUATE RESIDENCE CENTER FOREIGN STUDENTS' PREFERENCES FOR HELP WITH A PERSONAL PROBLEM

Preference	Number	Per cent*
1. A friend from your own country	53	28
2. Someone from Dean Dowling's office (foreign student advisor)	48	25
3. An American friend	22	11
4. A friend from another country	6	3
5. Some other person	22	11
6. More than one of the above checked	27	14
7. Did not answer	15	8
Total	193	100
*Per cent rounded to nearest whole number		

Table 62 shows that when faced with a serious personal problem more than one-half of the foreign students would seek help from a fellow national or from someone in Dean Dowling's office (the foreign student advisor). Of the remaining foreign students, 22 indicated that they would ask an American friend; and 22 said that they would ask some other person, while six of the students would seek help from a friend from another country.

The extent of social interaction with Americans was another point of interest in the study and therefore, the students were asked about their visits to American homes. One hundred and forty-three, or 74 per cent, said that they had been invited to visit in American homes and 135, or 94 per cent, indicated that they enjoyed their visits to various homes.

Three questions were included in the questionnaire which elicited the personal preferences of the foreign students for choosing: (a) a companion to attend a social event, (b) someone with whom to study a class assignment, and (c) someone to visit with them in their native countries. The responses to these questions are shown in Tables 63, 64, and 65.

TABLE 63. NUMBER AND PER CENT OF GRADUATE RESIDENCE CENTER FOREIGN STUDENTS' PREFERENCES FOR CHOOSING A COMPANION FOR A SOCIAL EVENT

Preference	Number	Per cent*
1. Someone from the United States	75	39
2. Someone from your own country	41	22
3. No preference	35	18
4. Someone from another country	10	5
5. It depends on the person	9	4
6. It depends on the event	2	1
7. No answer	21	11
Total	193	100
*Per cent rounded to nearest whole number		

The largest number of GRC foreign students indicated in Table 63 that they would prefer to go to a social event with an American and the second largest number of students stated that they would choose someone from their own country. Thirty-five students had no preference and 21, or 11 per cent, declined to answer this question.

The students' preferences for choosing someone with whom to study a class assignment are shown in Table 64.

TABLE 64. NUMBER AND PER CENT OF GRADUATE RESIDENCE CENTER FOREIGN STUDENTS' PREFERENCES FOR CHOOSING SOMEONE WITH WHOM TO STUDY A CLASS ASSIGNMENT

Preference	Number	Per cent*
1. Someone from the United States	90	47
2. No preference	30	16
3. Someone from your own country	27	14
4. Someone from another country	11	6
5. Depends on the person	7	3
6. Depends on the course	7	3
7. No answer	21	11
Total	193	100
*Per cent rounded to nearest whole number.		

According to Table 64 more students stated that they would choose an American friend than a fellow national as a study companion; and 30 students, or 16 per cent, indicated that they had no preference on this question.

Table 65 shows the preferences indicated by the students when they were asked, "If you had the opportunity to invite someone to visit your home in your native country, whom would you invite?"

TABLE 65. NUMBER AND PER CENT OF GRADUATE RESIDENCE CENTER FOREIGN STUDENTS' PREFERENCES FOR INVITING SOMEONE TO VISIT THEM IN THEIR NATIVE COUNTRY

Preference	Number	Per cent*
1. Someone from the United States	109	57
2. No preference	48	25
3. Someone from your own country	4	2
4. Someone from another country	4	2
5. Other Answers	8	4
6. No answer	20	10
Total	193	100
*Per cent rounded to nearest whole number.		

Of the 193 foreign students in the Graduate Residence Center, 109, or 57 per cent, stated according to Table 65 that they would choose to invite an American friend to visit them in their native country, and 48, or 25 per cent, had no

preference for inviting someone to visit with them. Also, twenty students, or 10 per cent, did not answer this question.

A list of activities was presented in the questionnaire and students were asked to indicate whether or not they thought the activities were helpful in promoting cross-cultural interaction. The responses to this item are shown in Table 66.

TABLE 66. RESPONSES OF GRADUATE RESIDENCE CENTER FOREIGN STUDENTS CONCERNING THE EFFECTIVENESS OF CERTAIN ACTIVITIES IN PROMOTING CROSS-CULTURAL INTERACTION

Activity	Response	
	Yes	No
1. Cosmopolitan Club	120	21
2. YM/YWCA activities	102	21
3. GRC Foreign Student Committee	97	25
4. Foreign student receptions	93	25
5. National student groups and their activities	73	27
6. Campus religious groups	52	41

According to Table 66 more students answered yes to each activity than the number of students who answered no; and of the activities listed, the Cosmopolitan Club and the YW/YMCA activities received more yes votes than any of the others. Furthermore, in response to a question concerning participation, 136, or 70 per cent, of the students indicated that they had participated in one or more of these activities listed in

Table 13. Also, 138, or 72 per cent, stated that informal parties and activities were more helpful than organized activities in encouraging interaction between foreign and American students.

In discussing the foreign students' preferences for companions, tables 63, 64, and 65 indicate the preference of foreign students for choosing a companion for a social event, a class assignment, and for inviting someone to visit them in their native country.

Table 66 lists the foreign students' responses to a question concerning the effectiveness of certain activities in promoting cross-cultural interaction. High "yes" votes for all of them indicate the enthusiasm of foreign students for these activities and the desire to have cross-cultural interaction.

There was a relatively low number of votes for Graduate Residence Center foreign students committee despite the fact that subsequent information indicated that this is the place where most foreign students have the greatest degree of cross-cultural interaction.

#### The Graduate Residence Center American Student Populations

Questionnaires returned by the Graduate Residence Center foreign student population contained the names of 148 American student friends; and these American students comprised the named population for the present investigation.



During the academic year of 1963-64 there were 475 American students living in the Graduate Residence Center who had not been named as friends by foreign students. Of these 475 American students, 330, or 69 per cent were interviewed for the study and they comprised the not named population.

Personal data characteristics. As a part of the over-all design of the study, personal data information was obtained from the records on file in the Dean of Students' Office. The chi-square statistical technique was used to compare the students in the named and not named groups on the basis of 14 items of personal data. The personal data items used in the analysis were: age, sex, marital status, field of study, home state, size of home town, participation in activities, military service experience, birthplaces of father and mother, educational level of father and mother, and occupations of father and mother. The following analyses of the personal data items reflected the similarities and the differences of the two populations.

1. The age range for students in each group was divided into three levels; and a comparison of the differences between the groups in terms of age differences is shown in Table 67.

TABLE 67. DIFFERENCES BETWEEN THE AGES OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS

Ages	Named		Not named	
	Observed	Expected	Observed	Expected
20 to 25	98	103.414	236	230.586
26 to 30	32	28.176	59	62.824
31 to 58	18	16.410	35	36.590
Total	148	148	330	330
Degrees of freedom		2		
Chi-square		1.385*		

\* Not significant at the .05 level of confidence.

As shown in the chi-square comparison in Table 67 there were not as many named students as expected in the 20 to 25 year range; and there were more students than expected in the 26 to 30 and the 31 to 58 year ranges. In the not named group the observed frequency was slightly larger than expected in the 20 to 25 year level, but less than expected in the two higher age brackets. These differences between the groups were so small, however, that with two degrees of freedom the chi-square value of 1.385 was not large enough to reach the .05 level of confidence. It was concluded, therefore, that there was no difference between the groups on the basis of age.

2. Although the number of males in the foreign student population was twice as large as the number of females, this ratio was not repeated in the number of male and female friends that were named.

The differences between the male and female ratio of the American students in the named and not named groups are shown in Table 68.

TABLE 68. DIFFERENCES BETWEEN THE STUDENTS IN THE NAMED AND NOT NAMED GROUPS ON THE BASIS OF SEX

Sex	Named		Not named	
	Observed	Expected	Observed	Expected
Males	82	87.314	200	194
Females	66	60.686	130	135.314
Total	148	148	330	330
Degrees of freedom		1		
Chi-square		1.1423*		

\* Not significant at the .05 level of confidence.

Table 68 shows that the named group had fewer males than expected and slightly more females than was expected. On the other hand, the not named group contained more males than expected and fewer females than expected. With one degree of freedom the chi-square value of 1.1423 was far too small to reach the .05 level of confidence. Because of the small chi-square value, it was concluded that there were no significant differences between the two groups.

3. In the Graduate Residence Center foreign student population 39, or 20 per cent, of the students were married.

The number of married American students chosen as close friends, however, did not equal a one-to-one ratio with the number of married foreign students.

Table 69 shows the observed and expected frequencies of the students in the named and not named populations in terms of marital status.

TABLE 69. DIFFERENCES BETWEEN THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS IN TERMS OF MARITAL STATUS

Marital status	Named		Not named	
	Observed	Expected	Observed	Expected
Single	131	136.854	311	305.146
Married	17	11.146	19	24.854
Total	148	148	330	330
Degrees of freedom		1		
Chi-square		4.8152*		

\*Significant at the .05 level of confidence.

Although only about 11 per cent of the American students were married, it can be seen in Table 69 that the frequency in this category was greater than expected for the named population. Also, the named group contained fewer single students than expected in the chi-square ratio, while the not named group contained more single students and fewer married students than expected. With one degree of freedom the chi-square value of 3.84 for the .05 level of confidence and it was concluded

that there was a significant difference between the two groups in terms of marital status.

4. In order to determine if American students in some academic fields were chosen as friends by foreign students more so than students in other fields, the students' courses of study were combined into eight major categories and one broad general category labeled "other". (A list of the fields in each category is presented in Appendix I) The comparison of the major fields of study for the named and not named populations is shown in Table 70.

TABLE 70. DIFFERENCES BETWEEN THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE BASIS OF FIELDS OF STUDY

Field of Study	Named		Not named	
	Observed	Expected	Observed	Expected
1. Languages and Literature	37	26.318	48	58.682
2. Government and Related fields	26	24.460	53	54.540
3. History, National Studies and related fields	17	14.243	29	31.757
4. Pre-professional and Social Service fields	12	10.527	22	23.473
5. Biological and Physical Science	10	19.506	53	43.494
6. Behavioral Science	6	5.573	12	12.427
7. Education	15	23.531	61	52.469
8. Music	16	17.339	40	38.661
9. Other	9	6.502	12	14.498
Total	148	148	330	330
Degrees of freedom		8		
Chi-square		20.270*		

\*Significant at the .01 level of confidence.

According to Table 70 there were more friends of foreign students than expected in the fields related to: languages and literature, government, history, pre-professional and social service, behavioral sciences, and the "other" category. The



frequencies were less than expected for the named group in the fields of biological and physical sciences, education, and music. For the not named group there were fewer students than expected in the first four categories of Table 70 and the "other" category; but the frequencies were greater than expected in the biological and physical sciences, education, and music fields. With eight degrees of freedom the chi-square value of 20.270 was slightly larger than the value of 20.09 needed for the .01 level of confidence and therefore the groups were accepted as being significantly different at the .01 level.

Because of the significant difference between the two groups in terms of fields of study, additional one-way chi-square comparisons were computed to determine which cells of Table 70 were contributing to the difference. Each field of study was compared against every other and the statistically significant differences that were obtained are presented in Tables 71, 72, and 73. The one-way chi-square analyses between fields which were not significantly different are not presented in the text because it is assumed that they did not contribute to the over-all difference between the two populations.

Table 71 shows three chi-square contingency tables that compare the academic categories of pre-professional and social service, biological and physical sciences, education, and "other".

**TABLE 71. SIGNIFICANT DIFFERENCES BETWEEN NAMED AND NOT NAMED STUDENTS IN THE PRE-PROFESSION, SCIENCES, EDUCATION, AND "OTHER" FIELDS OF STUDY**

Field of Study	Named		Not named	
	Observed	Expected	Observed	Expected
Pre-professional and social service	12	7.711	22	26.289
Biological and physical science	10	14.289	53	48.711
Total	22	22	75	75
df and chi-square	1	4.74*		
Biological and physical science	10	14.250	53	48.750
"other"	9	4.750	12	16.250
Total	19	19	65	65
df and chi-square	1	6.55*		
Education	15	18.804	61	57.196
"other"	9	5.196	12	15.804
Total	24	24	73	73
df and chi-square	1	4.72*		

\*Significant at the .05 level of confidence

It can be seen in Table 71 that when the pre-professional and science fields were compared there were more students than expected from the named group majoring in the pre-professional and social service fields, and fewer students than expected from this group majoring in the biological and physical sciences.

The chi-square value of 4.74 with one degree of freedom was significant at the .05 level of confidence. In the second one-way comparison of Table 71 there were fewer named students than expected majoring in the science fields and more students than expected from this group majoring in fields in the "other" category. The "other" category contained such fields as journalism, home economics, police administration, speech and theater, and mass communications. With one degree of freedom the chi-square value of 6.55 obtained in this second contingency table was significant at the .05 level of confidence. In the third contingency table it was found that fewer named students than expected were majoring in education and more students than expected in this group were majoring in fields in the "other" category. The chi-square value of 4.72 with one degree of freedom in this third table was found to be significant at the .05 level of confidence. Thus, in each of the three one-way comparisons of Table 71 the obtained chi-square values were large enough to indicate a statistically significant difference between the students in the named and not named populations in the fields of pre-professional and social service, biological and physical sciences, education and "others".

The differences between the number of students in the named and not named populations in the fields of government, the sciences, history and education are shown in Table 72.

**TABLE 72. SIGNIFICANT DIFFERENCES BETWEEN NAMED AND NOT NAMED STUDENTS IN THE FIELDS OF GOVERNMENT, SCIENCE, HISTORY, AND EDUCATION**

Field of Study	Named		Not named	
	Observed	Expected	Observed	Expected
Government	26	20.028	53	58.972
Biological and physical sciences	10	15.972	53	47.028
Total	36	36	106	106
df and chi-square	1	5.37*		
History and related fields	17	11.394	29	34.606
Biological and physical sciences	10	15.606	53	47.394
Total	27	27	82	82
df and chi-square	1	6.34*		
History and related fields	17	12.066	29	33.934
Education	15	19.934	61	56.066
Total	32	32	90	90
df and chi-square	1	4.39*		

\*Significant at the .05 level of confidence

The first contingency table in Table 72 shows that there were more named students than expected in the field of government and fewer named students than expected in biological and physical sciences. Fewer not named students than expected were majoring in government and more than expected were in the

science fields. The chi-square value of 5.37 with one degree of freedom was large enough to be significant at the .05 level of confidence. In the second comparison it was found that more named students than expected were in history and its related fields and again, fewer named students than expected were in the sciences. With one degree of freedom a chi-square value of 6.34 was obtained and the groups were accepted as being significantly different at the .05 level of confidence. When the two groups were compared in terms of history and education it was found that more named students than expected majored in history and its related fields and fewer students than expected were majoring in education. In the not named group there were fewer students in history than expected and more students than expected in education. A chi-square value of 4.39 was obtained in this one-way comparison and with one degree of freedom this was found to be significant at the .05 level of confidence. Thus, the students in the named and not named populations were accepted as being significantly different in all three of the chi-square comparisons of Table 72.

The greatest statistical differences between academic areas were found within the one-way comparisons for literature and languages, the sciences, and education. These differences are shown in Table 73.

**TABLE 73. SIGNIFICANT DIFFERENCES BETWEEN NAMED AND NOT NAMED STUDENTS IN THE FIELDS OF LANGUAGES AND LITERATURE, SCIENCE, AND EDUCATION**

Field of Study	Named		Not named	
	Observed	Expected	Observed	Expected
Languages and literature	37	26.993	48	58.007
Biological and physical sciences	10	20.007	53.	42.993
Total	47	47	101	101
df and chi-square	1	12.77**		
Languages and literature	37	27.453	48	57.547
Education	15	24.547	61	51.453
Total	52	52	109	109
df and chi-square	1	10.38*		

\*\* Significant at the .001 level of confidence.

\*Significant at the .01 level of confidence.

Statistically significant differences at the .001 level of confidence are shown in the first contingency table of Table 73. Far more named students than expected were majoring in the languages and literature, and fewer named students than expected were majoring in the sciences. Also, fewer not named students than expected were in the fields of languages and literature, while more students than expected in this group were majoring in the sciences. With one degree of freedom the chi-square value of 12.77 was so large that it resulted in



statistically significant differences between the two groups at the .001 level of confidence. In the second one-way comparison of Table 73 it was found that more students than expected in the named population were majoring in languages and literature, and fewer students than expected were in education. Conversely, there were fewer not named students in languages and literature than expected, and more students than expected in the field of education. The differences in this table resulted in a chi-square value of 10.38 which, with one degree of freedom, was significant at the .01 level of confidence.

An analysis of the three preceding Tables--71, 72, and 73--reflected two definite trends in the major subject fields of the American student populations. The first trend indicated that American students selected as friends by foreign students tended to major more often than would be expected in the areas of: (a) history and its related fields, and (b) languages and literature. The second trend indicated rather strongly that foreign students tended to make fewer friends with American students who were majoring in the sciences or in education than they did with students in any other field.

5. Although the academic interests of the American students were a major concern in this investigation another facet of the students' interests was also measured. It was believed that participation, or lack of participation in scholastic activities might reflect some additional personality differences and therefore, a comparison was made between the

two groups. A record of participation in high school or college was available for 142 of the students in the named group and 301 of the students in the not named group. Table 74 shows the comparison of the two groups in terms of participation in extracurricular activities.

**TABLE 74. DIFFERENCES BETWEEN THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS IN TERMS OF PARTICIPATION IN HIGH SCHOOL AND COLLEGE EXTRACURRICULAR ACTIVITIES**

Participation	Named		Not named	
	Observed	Expected	Observed	Expected
Yes	128	126.614	267	268.386
No	14	15.386	34	32.614
Total	142	142	301	301
Degrees of freedom			1	
Chi-square			0.206*	

\*Not significant at the .05 level of confidence

As seen in Table 74 only two more students than expected in the named group had participated in activities; and one less student than expected in the not named group had participated in activities. These differences were so slight that with one degree of freedom the chi-square value of 0.206 was obviously far too small to reach the .05 level of confidence. Thus, it was concluded that there was no significant difference between the two groups in terms of participation in activities.

6. In addition to the comparison of previous extra-curricular experiences, it was also thought that comparison of military service experience might reflect some differences between the two populations. Data were available on the military service experience of 143 students in the named group and 323 students in the not named group; and this information is presented in Table 75.

TABLE 75. DIFFERENCES BETWEEN THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE BASIS OF MILITARY SERVICE EXPERIENCE

Experience	Named		Not named	
	Observed	Expected	Observed	Expected
Yes	9	11.968	30	27.032
No	134	131.032	293	295.968
Total	143	143	323	323
Degrees of freedom			1	
Chi-square			1.158*	

\*Not significant at the .05 level of confidence.

Table 75 shows that not as many students in the named group as expected had had previous military service experience; and more students than expected in the not named group had been the military service. The chi-square value of 1.158 with one degree of freedom failed to reach the .05 level of confidence, however, and it was concluded that there was no significant difference between the two groups in terms of military service experience.

A brief summary of the personal characteristics and experiences of the students in the named and not named populations presented thus far indicated only two statistically significant differences between the two groups. The two significant differences arose in the areas of marital status and major fields of study. There were more married students in the named population and more single students in the not named population than were expected by the chi-square ratio. Furthermore, chi-square ratios also indicated that friends of foreign students tended to major in the fields of languages and literature, and history, rather than in the fields of education and the sciences.

7. The home states of the students were categorized according to five main regions of the country in order to determine if there were differences between the students in the named and not named population on the basis of national region. Table 76 shows the geographical distribution of students according to the regions encompassing their home states. (A list of the regions and the states within each region is presented in Appendix H)

TABLE 76. DIFFERENCES BETWEEN THE GEOGRAPHICAL DISTRIBUTION OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE BASIS OF HOME STATES WITHIN REGIONS OF THE COUNTRY

Region	Named		Not named	
	Observed	Expected	Observed	Expected
Northeast	46	35.916	70	80.084
Middle states	70	78.335	183	174.665
Southeast	18	21.364	51	47.636
Southwest	9	4.644	6	10.356
Western states	5	7.741	20	17.259
Total	148	148	330	330
Degrees of freedom		4		
Chi-square		13.474*		

\*Significant at the .01 level of confidence.

It can be seen in Table 76 that there were more students in the named group than expected from the Northeast and Southwest regions of the country; and there were fewer named students than expected from the Middle states, western states, and the Southeast. In the not named group the observed frequency was greater than expected in the Middle states, western states, and the Southeast regions; and also, there were fewer students than expected in the not named group from the Northeast and Southwest regions. The chi-square value of 13.474 with four degrees of freedom was large enough to indicate a statistical difference between the two populations at the .05 level of confidence. Because of this divergence it

was concluded that the populations were significantly different in terms of the students' home states and national regions.

Since a significant difference was found in the geographical distribution of home states, additional one-way chi-square comparisons were computed to determine which cells in Table 76 were contributing to the difference. Each region was compared to every other region in chi-square analyses and the significant comparisons are shown in Table 77.



**TABLE 77. SIGNIFICANT DIFFERENCES BETWEEN THE REGIONAL DISTRIBUTION OF HOME STATES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS**

Region	Named		Not named	
	Observed	Expected	Observed	Expected
Northeast	46	36.466	70	79.534
Middle states	70	79.534	183	173.466
Total	116	116	253	253
df and chi-square	1			5.30*
Middle states	70	74.578	183	178.422
Southwest	9	4.422	6	10.578
Total	79	79	189	189
df and chi-square	1			7.12**
Western states	5	8.750	20	16.250
Southwest	9	5.250	6	9.750
Total	14	14	26	26
df and chi-square	1			6.59*
Southeast	18	22.179	51	46.821
Southwest	9	4.821	6	10.179
Total	27	27	57	57
df and chi-square	1			6.49*

\*\* Significant at the .01 level of confidence

\*Significant at the .05 level of confidence

Table 77 shows that four of the ten chi-square comparisons from Table 76 contained significant differences. In the first contingency table of Table 77 it was found that more named students than expected came from the Northeast and fewer named students than expected came from the Middle states. On the other hand, fewer not named students indicated that they lived in the Northeast and more of these students than expected lived in the Middle states. With one degree of freedom the chi-square value of 5.30 was significant at the .05 level of confidence. The second one-way comparison shows that fewer named students than expected lived in the Middle states and more of these students than expected lived in the Southwest; and again, more not named students lived in the Middle states while fewer than expected reported that they lived in the Southwest. For this comparison with one degree of freedom a chi-square value of 7.12 was obtained which was found to be significant at the .01 level of confidence. When the western states were compared with the Southwest, in the third contingency table of Table 77, it was revealed that fewer named students came from the western states and more students than expected came from the Southwest. Conversely, more not named students came from the western states and fewer of these students came from the Southwest. A chi-square value of 6.59 was obtained with one degree of freedom and this value was significant at the .05 level of confidence. In the last one-way comparison of Table 77 it was found that fewer named students than expected came from the Southeast and more of these students

than expected came from the Southwest. More not named students than expected lived in the Southeast and fewer of these students than expected, according to the fourth contingency table, came from states in the Southwest. With one degree of freedom the chi-square value of 6.49 obtained in this comparison was significant at the .05 level of confidence.

A summary of these four contingency tables in Table 77 indicated that a greater proportion of named students than not named students tended to come from the Northeast and Southwest regions of the country. On the other hand, a greater proportion of the not named students than named students tended to reside in the middle states, western states, and the Southeast regions of the country.

8. In order to determine what other geographical factors might characterize the American students, the populations were analyzed in terms of the size of their home towns. The home towns of the students in both groups were divided into six categories on the basis of population; and Table 78 shows the distribution of students according to the size of their home towns.

TABLE 78. DIFFERENCES BETWEEN THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS IN TERMS OF SIZE OF HOME TOWNS

Size of home town	Named		Not named	
	Observed	Expected	Observed	Expected
Under 2500	28	26.628	58	59.372
2501-10,000	14	20.745	53	46.255
10,001-25,000	17	16.410	36	36.590
25,001-50,000	17	16.720	37	37.280
50,001-100,000	11	12.695	30	28.305
Over 100,000	61	54.803	116	122.197
Total	148	148	330	330
Degrees of freedom			5	
Chi-square			4.658*	

\*Not significant at the .05 level of confidence

As can be seen in Table 78 there were only slight differences between the observed and expected frequencies in most of the population groupings--with the exception of the 2501 to 10,000 level, and the "over 100,000" level. In the 2501 to 10,000 level there were fewer named students than expected and more not named students than expected. The "over 100,000" level contained more named students than expected but fewer not named students than expected. With five degrees of freedom, however, the chi-square value of 4.658 was not large enough to reach the .05 level of confidence and it was concluded that there were no significant

differences between the two groups in terms of the populations of their home towns.

Several items of data were recorded to ascertain the familial characteristics of the students in both populations. These data were: (a) birthplaces of parents, (b) educational levels of parents, and (c) the occupations of parents.

9. The birthplaces of the fathers and mothers of the students were divided into two categories: (a) the United States, and (b) foreign born. Information was available on the birthplaces of 128 fathers of students in the named group and 272 fathers of students in the not named group. The chi-square comparison of the fathers' birthplaces is shown in Table 79.

TABLE 79. DIFFERENCES BETWEEN THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS IN TERMS OF BIRTHPLACES OF FATHERS

Birthplace of Father	Named		Not named	
	Observed	Expected	Observed	Expected
United States	111	116.160	252	246.840
Foreign	17	11.840	20	25.160
Total	128	128	272	272
Degrees of freedom			1	
Chi-square			3.644*	

\*Not significant at the .05 level of confidence.

Table 79 shows that not as many fathers of students in the named group as expected were born in the United States; and more fathers of students in the not named group than expected were born in the United States. Since these differences were not extremely large the chi-square value of 3.644 with one degree of freedom did not reach the .05 level of confidence. Thus, the differences were considered not to be significant and they were therefore attributed to chance fluctuations of the populations.

10. The birthplaces of 126 mothers of students in the named group and 268 mothers of students in the not named group were obtained from the personal data records. The results of the chi-square comparison of these data are shown in Table 80.

TABLE 80. DIFFERENCES BETWEEN THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS IN TERMS OF BIRTHPLACES OF MOTHERS

Birthplace of Mother	Named		Not named	
	Observed	Expected	Observed	Expected
United States	113	116.406	251	247.594
Foreign	13	9.594	17	20.406
Total	126	126	268	268
Degrees of freedom			1	
Chi-square			1.924*	

\*Not significant at the .05 level of confidence.



A trend similar to the ratios obtained for fathers' birthplaces can be found for mothers' birthplaces in Table 80. There were not as many mothers of named students as expected born in the United States; and more mothers of not named students than expected were born in the United States. With one degree of freedom, however, the chi-square value of 1.924 did not reach the .05 level of confidence, and the differences between the two groups were considered not to be significant.

11. In addition to the national origin of the fathers and mothers it was believed that the parental educational levels might reflect some differences between the students in the named and not named populations. Thus, the educational levels of the parents in terms of numbers of years of education were obtained from the personal records. For the purpose of comparing the education of parents the number of years were grouped into five major categories. A comparison of the data on 111 fathers of named students and 236 fathers of not named students is shown in Table 81.

**TABLE 81. DIFFERENCES BETWEEN THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS IN TERMS OF THE EDUCATIONAL LEVELS OF THEIR FATHERS**

Number of Years	Named		Not named	
	Observed	Expected	Observed	Expected
6 to 8	11	14.395	34	30.605
9 to 11	9	11.196	26	23.804
12	31	29.749	62	63.251
13 to 16	42	38.066	77	80.934
17 to 19	18	17.594	37	37.406
Total	111	111	236	236
Degrees of freedom			4	
Chi-square			2.499*	

\*Not significant at the .05 level of confidence.

Table 81 shows that there were slight differences between the observed and expected frequencies of educational levels for fathers of students in the named group. The largest differences occurred in the 6 to 8 year level where there were fewer fathers of named students than expected; and in the 13 to 16 year level there were more fathers than expected for the students in the named group. The differences were also slight for the fathers of students in the not named group but in the 6 to 8 year level there were more fathers than expected, and in the 13 to 16 year level there were fewer fathers than expected. Reference to the chi-square table of

values showed that the chi-square value of 2.499 with four degrees of freedom was not large enough to reach the .05 level of significance. It was concluded, therefore, that there was no significant difference between the two groups on the basis of their fathers' educational levels.

12. Information was available on the educational levels of 124 mothers of students in the named group and 261 mothers of students in the not named group. Table 82 shows the chi-square value of the ratios for educational levels of mothers of students in the named and not named populations.

**TABLE 82. DIFFERENCES BETWEEN THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS IN TERMS OF THE EDUCATIONAL LEVELS OF THEIR MOTHERS**

Number of years	Named		Not named	
	Observed	Expected	Observed	Expected
6 to 8	9	10.629	24	22.371
9 to 11	8	10.629	25	22.371
12	41	43.158	93	90.842
13 to 16	51	49.600	103	104.400
17 to 19	15	9.984	16	21.016
Total	124	124	261	261
Degrees of freedom	4			
Chi-square	5.261*			

\*Not significant at the .05 level of confidence.

According to Table 82 there were only slight differences between the educational levels of the mothers of students in both the named and not named populations. The largest differences occurred in the 17 to 19 year levels where there were more mothers of named students than expected and fewer mothers of students in the not named group. These differences were so small, however, that with four degrees of freedom the chi-square value of 5.261 did not reach the .05 level of confidence and it was concluded that there were no significant differences between the educational levels of the students' mothers.

13-14. In order to estimate the socio-economic levels of the students the occupations of their fathers and mothers were coded according to broad fields of work and then combined into three major categories. In addition to these three categories, a fourth category was added which was comprised of parents who were housewives, retired, unemployed, or deceased. The results of the comparison of the occupational categories for the students' parents is shown in Table 83.

**TABLE 83. DIFFERENCES BETWEEN THE OCCUPATIONAL LEVELS OF THE PARENTS OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS**

Occupational Level	Named		Not named	
	Observed	Expected	Observed	Expected
Professional and Managerial	72	69.021	145	147.979
Semi-professional and skilled	61	55.662	114	119.338
Semi-skilled and unskilled	37	40.395	90	86.605
Housewives, retired, unemployed, and deceased	87	91.922	202	197.078
Total	257	257	551	551
Degrees of freedom			3	
Chi-square			1.744*	

\* Not significant at the .05 level of confidence.

Table 83 shows that more parents of students in the named group than expected held jobs in the professional and managerial, and semi-professional and skilled groups. Fewer named students' parents than expected were in the semi-skilled and unskilled and the unemployed categories. There were fewer not named students' parents in the two higher categories and more parents of these students than expected in the semi-skilled and unskilled and the unemployed categories. With three degrees of freedom the chi-square value of 1.744 was too small to reach the .05 level of confidence, and therefore it was concluded

that there were no significant differences between the occupational levels of the parents of the students in the named and not named populations.

Summary of personal data characteristics. A chi-square analyses was made between the students in the named and not named populations on the following items of personal data: age, sex, marital status, field of study, home state, size of home town, birthplaces of father and mother, educational levels of father and mother, occupational levels of father and mother, participation in activities, and military service experience. Significant differences between the two groups were found on three of the 14 items of data. The three items which revealed statistically significant differences between the two groups were: (a) marital status, (b) fields of study, and (c) home states.

It was found that there were more married students and fewer single students than expected in the named population; and more single students and fewer married students than expected in the not named population.

A comparison of the major fields of study revealed that significant differences existed between the students in the named and not named populations. The chi-square analyses showed that American student friends of foreign students tended to major more often than expected in the academic areas of : (a) history and its related fields, and (b) languages and literature. Furthermore, it was revealed that foreign students tended to name fewer American student friends,



proportionately, who were majoring in the biological and physical sciences and in education.

The third characteristic that reflected differences between the two groups of students was the national region encompassing their home states. American student friends of foreign students tended to come from the Northeast and Southwest regions of the country more often than expected; and American students who were not named as friends tended to live in the Middle states, western states, and the Southeast regions of the country.

Personality Inventories. It was hoped that additional information would be obtained through the use of two personality inventories. Therefore, as a part of the interviewing procedure the American students were requested to complete the Edwards Personal Preference Schedule and the Allport-Vernon-Lindzey Study of Values.

The Edwards Personal Preference Schedule contains 15 variables, or "needs", which according to Murray (40) motivate people to act or react in certain ways. Scores from this instrument may be interpreted as indicating the relative strength of personal preferences for a variety of activities and interpersonal relationships (40:123-129). In the named population of 148 students, 81, or 54 per cent, completed the EPPS. Of these 81 students, 41 were males and 40 were females. In the not named population 169, or 51 per cent, of the 330 students completed the EPPS. Of these 169, 101 were males

and 68 were females. The average consistency score for these two groups of males and females exceeded 11 points; and according to Edwards, a consistency score of 11 or above indicates that the results are fairly reliable (19:15).

The Allport-Vernon-Lindzey Study of Values Inventory attempts to measure six personality traits postulated by Spranger. This Scale contains six broad categories of interests or values designed to characterize personality types (3:3). Of the 148 students in the named population 83 completed the Study of Values and 41 of these were females and 42 were males. In the not named population 161 of the 330 students completed the Study of Values and 62 of these were females and 99 were males.

A one-way analysis of variance was used to compare the inventory scores of the students in both populations on the basis of sex. Thus, there were four statistical comparisons made up of the following groups: (a) males on the EPPS, (b) females on the EPPS, (c) males on the Study of Values, and (d) females on the Study of Values.

Only the variables on which the populations were shown to be significantly different are presented in this chapter. The analysis of variance data for all variables on which the groups were not significantly different are presented in Appendix K.

1. For the males on the EPPS only the Nurturance variable resulted in significant differences between the groups; and Table 84 shows the F ratio for male students on the Nurturance variable.

**TABLE 84. F RATIO ON THE NURTURANCE VARIABLE OF THE EDWARDS PERSONAL PREFERENCE SCHEDULE FOR MALE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS**

Variable	Source of Variation	DF	Mean Square	F Ratio
Nurturance	Between groups	1	123.680	
	Within groups	140	23.62	5.234*

\*Significant at the .05 level of confidence.

With one degree of freedom between groups and 140 degrees within groups the F ratio of 5.23 in Table 84 exceeded the value of 3.94 needed to reach the .05 level of confidence. Therefore, it was concluded that there was a statistically significant difference between male students in the named and not named groups on the Nurturance variable of the EPPS. Referral to the mean scores for each group on this variable showed that the mean of 16.0 for the named group was higher than the mean of 13.94 for the males in the not named group. According to the normative group scores on the Nurturance variable for males (19:12) a score of 16 would be at the 70th percentile and a score of 14 would be at about the 55th percentile for college males. Thus, since the mean score was higher for the named males it was assumed that these students could be characterized as having a greater need to exhibit, or feel, what Murray terms nurturance (40:123-129). In other words, the male students in the named population might be described as the type of people who would help

friends when they are in trouble, assist others less fortunate than themselves, and who would treat others with kindness and sympathy.

2. The scores for females on the EPPS showed that the two groups were significantly different on two of the variables. The F ratios are presented in Table 85 for these two variables, Autonomy and Heterosexuality.

TABLE 85. F RATIOS ON THE AUTONOMY AND HETEROSEXUALITY VARIABLES OF THE EDWARDS PERSONAL PREFERENCE SCHEDULE FOR THE FEMALES IN THE NAMED AND NOT NAMED POPULATIONS

Variable	Source of Variation	DF	Mean Square	F Ratio
Autonomy	Between groups	1	245.717	
	Within groups	140	19.627	12.52**
Heterosexuality	Between groups	1	166.993	
	Within groups	140	37.601	4.44*

\*\* Significant at the .01 level of confidence.

\* Significant at the .05 level of confidence.

Table 85 shows that the Autonomy scores for the females in the named and not named populations resulted in an F ratio of 12.52. With one degree of freedom between groups and 140 degrees of freedom within groups this F ratio of 12.52 was significant at the .01 level of confidence, and it was concluded that the groups were significantly different on the Autonomy variable. Since the females in the named group

obtained an average score of 15.0 and the net named group obtained an average score of 11.9 it was assumed that the named females felt a greater need to be autonomous than the net named females. On the college norms for women a score of 15 would be at the 61st percentile and a score of 11.9 would be at about the 34th percentile (19:12). Therefore, judging from the scores on this variable the females in the named group might be described as people who like to be able to come and go as they please, to say what they think about things, to be independent, and to do things that are unconventional (19:11).

The F ratio for the Heterosexuality variable is also given in Table 85. Referral to the table of F values revealed that the F ratio of 4.44 exceeded the value of 3.94 needed to reach the .05 level of confidence. Thus, the groups were accepted as being significantly different at the .05 level. The average score for the named group on this variable was 13.9 while the net named group's average score was 16.5. The percentile equivalent of 13.9 would be 52 and the percentile for 16.5 would be about 66 on the college norms for women (19:12). Although this 66 percentile score is not extremely high, it might be possible to characterize these students as women who like to go out with members of the opposite sex, to engage in activities with members of the opposite sex, and who like to be regarded as physically attractive by those of the opposite sex (19:11).

3. On the Study of Values Scale the named and not named male students averaged statistically different scores on two of the six personality variables. The F ratios for the Economic and Political values are shown in Table 86.

TABLE 86. F RATIOS ON THE ECONOMIC AND POLITICAL SCALES OF THE STUDY OF VALUES INVENTORY FOR MALES IN THE NAMED AND NOT NAMED POPULATIONS

Scale	Source of Variation	DF	Mean Square	F ratio
Economic	Between groups	1	605.807	
	Within groups	139	80.738	7.50**
Political	Between groups	1	223.891	
	Within groups	139	49.750	4.50*

\*\* Significant at the .01 level of confidence.

\* Significant at the .05 level of confidence.

According to Table 86 the F ratio of 7.50 on the Economic value was significant at the .01 level of confidence and therefore it was concluded that the groups were significantly different. A comparison of the mean scores for each group showed that the named males averaged 32 points and the not named males averaged 37 points on the Economic value, but both of these scores were below the average Economic score of 42.05 for male college students (3:11). Because the males in the named group scores almost ten points below the average score for college males, however, it might be possible to



describe these men as having less concern for, and interest in, the practical affairs of the business world than would the average college male (3:4).

Also shown in Table 86 is the F ratio of 4.50 for the average named and not named males' scores on the Political value. The 4.50 ratio exceeded the value of 3.94 needed to reach the .05 level of confidence and the groups were accepted as being significantly different. Mean scores for both groups showed that the named males averaged 38 points and the not named males averaged 41 points on the Political value scale. These average scores were very close to the over-all average score of 42 for the college men's norm group (3:11). The slightly higher average score obtained by the males in the not named group might indicate that these men place a higher value on competition and the satisfaction that comes from positions of leadership (3:5).

4. The Study of Values scores for the females in both groups resulted in statistically significant differences on two of the values. The F ratios for females on the Theoretical and Political values are presented in Table 87.

**TABLE 87. F RATIOS ON THE THEORETICAL AND POLITICAL SCALES OF THE STUDY OF VALUES INVENTORY FOR FEMALES IN THE NAMED AND NOT NAMED POPULATIONS**

Scale	Source of Variation	DF	Mean Square	F ratio
Theoretical	Between groups	1	285.045	
	Within groups	101	53.672	5.310*
Political	Between groups	1	331.471	
	Within groups	101	43.771	7.572**

\*\* Significant at the .01 level of confidence

\*Significant at the .05 level of confidence.

As seen in Table 87 the F ratios on the Theoretical value for females in the named and not named populations was 5.31. With one degree of freedom between groups and 101 degrees of freedom within groups the 5.31 ratio exceeded the 3.94 value needed to reach the .05 level of confidence. Thus, the groups were accepted as being significantly different. The mean score of 41 obtained by the named females, and the mean score of 38 obtained by the not named females<sup>1</sup> were both above the average score of 36.5 obtained by the college female norm group (3:11). Since the named females scored higher than the not named females it might be possible to characterize these named females as persons who place a high value on cognition and who reflect an empirical and rational point of view (3:4).

On the Political value shown in Table 87 the F ratio of 7.57 was statistically significant at the .01 level of confidence. Therefore, it was concluded that the groups were significantly different on this value. Average scores of 40 for the named females and 36 for the not named females were found to be both above and below the mean score of 38 obtained by the females in the college norm group (3:11). The above average mean score obtained by the named females might indicate that these women could be described as persons who place a high value on personal power and influence in life (3:5).

Summary of personality inventories. A one-way analysis of variance technique was used to compare the mean scores of the males and females in the named and not named populations on the Edwards Personal Preference Schedule and Study of Values.

Statistically significant differences were found on one variable of the EPPS for the male students and on two variables of the EPPS for the female students.

The mean scores of the males in the named and not named populations resulted in a significant difference on the Nurture variable of the Edwards Personal Preference Schedule. According to the normative group scores on the Nurture variable for college men, the average score of 16 obtained by the named males would be at the 70th percentile and the average score of 14 for the not named males would be at the 55th percentile (19:12).

The average scores obtained by the females in the named population resulted in significant differences on the Autonomy and Heterosexuality variables of the EPPS. On the Autonomy variable the named females obtained a mean score of 15, which would be at the 61st percentile on the college norms for women; and the not named females obtained a mean score of 11.9 which would be at about the 34th percentile on the college norms for women. On the Heterosexuality variable the named females averaged 13.9 points which would be at about the 52nd percentile on the college norms for women; and the not named females obtained a mean score of 16.5 which would be equal to about the 66th percentile on the college norms for women (19:11-12).

Scores obtained by the males in the named and not named populations resulted in statistically significant differences on two scales of the Study of Values. On the Economic scale the males in the named group obtained an average score of 32 points and the not named males averaged 37 points. Both of these scores were below the average Economic score of 42.05 for male college students (3:11). On the Political scale of the Study of Values the average score of 38 points obtained by the named males and the average score of 41 points obtained by the not named males were very close to the average score of 42 that was obtained by the college male norm group(3:11).

The females also scores significantly different on two of the Study of Values scales. On the Theoretical value the named females obtained a mean score of 41 points and the not named females obtained a mean score of 38 points. Both of these mean scores were above the average score of 36.5 which

was obtained by females in the college norm group. On the Political value the named females averaged 40 points and the not named females averaged 36 points. These scores were found to be both above and below the average score of 38 obtained by the female college norm group (3:11). It should be noted that the inventories were not necessarily returned by a true sample of the population. It should also be noted that the students taking the inventories are all graduate students who are being compared with undergraduate norms.

Personal interview responses. Personal interviews were held with 148 American students who lived in the Graduate Residence Center and who had been named as friends by foreign students and 330 American students who lived in the Graduate Residence Center but who had not been named as friends by foreign students. The interview responses were coded and the chi-square comparisons between the students in the named and not named populations were computed for each question. The 25 interview questions were grouped into six broad categories for the analyses and these categories were:

1. Cross-cultural patterns of friendship
2. American students' perceptions of foreign students
3. Extent of foreign students' influence on American students
4. American students' perceptions of other Americans' attitudes

5. American students' attitudes toward financial aid for foreign students
6. American students' opinions about foreign students' housing and personal difficulties

For the chi-square tables that reflected significant differences additional one-way chi-square comparisons were computed. Each category in the significant table was compared to every other category in order to determine which cells in the original table were contributing to the significant difference. Of these additional one-way comparisons, however, only those which show significant differences are presented in this chapter.

1. In order to ascertain the origin and development of cross-cultural friendships the American students were asked the following questions:

- a. How did you first meet this foreign student friend?
- b. Where do you usually get together?
- c. What interests do you usually have in common?
- d. Have you made friends with other foreign students?
- e. Are they from other countries of the world?
- f. Did you know other foreign people before you came to Indiana University?
- g. Where did you know them?
- h. Have you conversed with foreign students in any language other than English?
- i. What languages?

Prior to the interviews a letter was sent from the Dean of Students Office (Appendix C). Following the letter, a telephone call from the the Dean of Students Office (Appendix F) was used as a means of making arrangements for the interview.

The interviews were prefaced by a statement which provided a frame of reference for the questions in this first



major category. This statement was as follows:

"I think it will be easier if you start by thinking of one foreign student that you know fairly well. We don't want his name but for general identification could you tell me what country he comes from? \_\_\_\_\_ and where he lives in Bloomington? \_\_\_\_\_ Now, could you give me a brief history of your acquaintance?"

a. The first question of the interview concerning the origin of the friendship and the responses to the question, "How did you first meet this foreign student friend?", were combined into four main categories. Table 88 shows the four main categories of responses and the chi-square comparison for this question.

TABLE 88. DIFFERENCES BETWEEN THE RESPONSES OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "HOW DID YOU FIRST MEET THIS FOREIGN STUDENT FRIEND?"

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Academic areas	19	31.028	76	63.972
Residence Hall	83	70.873	134	146.127
Socially	69	67.281	137	138.719
Activities	7	8.818	20	18.182
Total	178	178	367	367
Degrees of freedom	3			
Chi-square	10.626*			

\* Significant at the .05 level of confidence.

As can be seen in Table 88 many of the American students in both groups responded in terms of meeting more than one foreign student because the responses exceed the total number of students in each group. Most of this interaction, however, for the named and the not named students occurred in the residence halls or in social situations. Fewer named students than expected indicated that they met foreign students in academic situations or in activities. The initial interaction for most of the students in the not named group also occurred in the residence halls and social situations but according to the chi-square ratio there were fewer students than expected in these two categories. The chi-square value of 10.626 with three degrees of freedom far exceeded the .05 level of confidence and it was concluded that there was a statistically significant difference between the two groups in terms of their initial meeting with a foreign student friend.

Since the groups were accepted as being significantly different, additional one-way chi-square comparisons were computed to determine which cells were contributing most heavily to the total chi-square value.

Table 89 shows that two of the one-way comparisons were significant.

**TABLE 89. SIGNIFICANT DIFFERENCES BETWEEN RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "HOW DID YOU FIRST MEET THIS FOREIGN STUDENT FRIEND?"**

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Academic areas	19	31.058	76	63.942
Residence hall	83	70.942	134	146.058
Total	102	102	210	210
df and chi-square	1			9.99**
Academic areas	19	27.774	76	67.226
Socially	69	60.226	137	145.774
Total	88	88	213	213
df and chi-square	1			5.72*

\*\* Significant at the .01 level of confidence.

\* Significant at the .05 level of confidence.

The first contingency table of Table 89 shows that when academic areas and residence halls were compared, more students than expected in the named group indicated that they had met their friends in the residence halls; and more students than expected in the not named group had met their friends in academic areas. With one degree of freedom the differences were so great that the chi-square value of 9.99 was statistically significant at the .01 level of confidence.

In the second half of Table 89 the category "academic areas" was compared with the category "socially." More named students than expected had met their friends socially and more

of the not named students than expected had met their friends in academic areas. The chi-square value of 5.72 with one degree of freedom was significant at the .05 level of confidence.

The results of the two chi-square comparisons in Table 89 seemed to indicate a definite trend in the origin of the cross-cultural friendships. Of the responses from the students in the named group, 152, or 84 per cent, indicated that their first meeting with foreign student friends occurred most of the time in living and social situations where the overture or initial impetus to meet would be voluntary and by choice. On the other hand, 271, or 73 per cent, of the 367 responses from the students in the not named group indicated that their first meetings occurred when they were in the living situations of the residence halls or in social situations. Furthermore, only 19, or 10 per cent, of the responses of the named students indicated that they met their friends in academic areas, while 76, or 20 per cent, of the responses from the not named students indicated that the initial meeting occurred in academic areas. Therefore, it might be concluded that the named students tended to seek out their foreign student friends by choice more so than the not named students who may have tended to accept the new friendships more passively as secondary gains in the academic situations.

b. The trend of freely choosing the company of foreign students was strengthened by the named students in the patterns showing the development of the friendships. Table 90 shows the four major categories of the responses to the question,

"Where do you usually get together with this foreign student friend?"

TABLE 90. DIFFERENCES BETWEEN THE RESPONSES OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "WHERE DO YOU USUALLY GET TOGETHER WITH THIS FOREIGN STUDENT FRIEND?"

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Academic	33	55.206	118	95.794
Residence halls	310	312.587	545	542.413
Socially	101	85.550	133	148.450
Activities	47	37.657	56	65.343
Total	491	491	852	852
Degrees of freedom			3	
Chi-square			22.165*	

\*Significant at the .001 level of significance.

It can be seen from the 491 responses from the named students and the 852 responses from the not named students in Table 90 that several answers were given by each student on this question. The students in the named group tended to gather with foreign students more often than expected in social and activity situations; but the responses from these students were less than expected in the academic and residence halls categories. The not named students indicated that they associated with foreign students more often than expected in

the academic and residence hall situations. Although 133 not named students stated that they got together socially with foreign students, the chi-square ratio indicated that this number was less than expected for this category. Referral to the chi-square table of values revealed that with three degrees of freedom the chi-square value of 22.165 greatly exceeded the 11.34 value needed to reach the .001 level of confidence. With such a large difference between the needed and obtained chi-square values it was concluded that there was a significant difference between the two groups in terms of where they got together with their foreign student friends.

In order to determine which cells were contributing to the significant difference additional chi-square comparisons were computed. Table 91 gives the one-way analyses of the significant response categories.



**TABLE 91. SIGNIFICANT DIFFERENCES BETWEEN RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "WHERE DO YOU USUALLY GET TOGETHER WITH YOUR FOREIGN STUDENT FRIEND?"**

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Academic areas	33	51.484	118	99.516
Residence halls	310	291.516	545	563.484
Total	343	343	663	663
df and chi-square	1			11.84*
Academic areas	33	52.556	118	98.444
Socially	101	81.444	133	152.556
Total	134	134	251	251
df and chi-square	1			18.36*
Academic areas	33	47.559	118	103.441
Activities	47	32.441	56	70.559
Total	80	80	174	174
df and chi-square	1			16.04*

\*Significant at the .001 level of confidence.

Table 91 shows that all three of the one-way comparisons obtained from Table 91 were significant. In fact, the chi-square values obtained in each table were so large that each one exceeded the .001 level of confidence. The three contingency tables show that the named students associated with the foreign students more often than expected in the residence halls, socially, and in activities; and they associated less

often than expected in academic areas. The not named students, however, indicated more often than expected that they associated with their foreign student friends in academic situations; and they got together less often than expected in the residence halls, socially, and in activities. Thus, the responses to this question again seemed to imply that the named group chose to associate with their foreign student friends on the basis of personal preference, while the not named students accepted the friendships more often as an outgrowth of their academic experiences.

c. Further information on the patterns of cross-cultural friendships was obtained from a question about the common interests between foreign and American students. The wide range of interests held in common by the foreign and American students were grouped into five major categories; and Table 92 shows the responses to the question, "What interests do you have in common with your foreign student friend?"

**TABLE 92. DIFFERENCES BETWEEN THE RESPONSES OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "WHAT INTERESTS DO YOU HAVE IN COMMON WITH YOUR FOREIGN STUDENT FRIEND?"**

Interests	Named		Not named	
	Observed	Expected	Observed	Expected
Academic-	68	85.360	170	152.640
Social and athletic	55	54.515	97	97.485
Cultural and religious	66	49.853	73	89.147
People	130	133.778	243	239.222
Other	54	49.494	84	88.506
Total	373	373	667	667
Degrees of freedom			4	
Chi-square			14.472*	

\*Significant at the .01 level of confidence.

According to Table 92 more named students than expected shared cultural, religious, and "other" interests in common with their foreign student friends; but fewer of these students than expected indicated a common interest in academic areas and people. In the not named group more students than expected shared common interests in academic areas and people; but fewer of these students than expected shared cultural, religious, and "other" interests in common with their foreign student friends. These differences were so large that the chi-square

value of 14.472 with four degrees of freedom exceed the .01 level of confidence. With this margin of difference it was concluded that the two groups were significantly different on the basis on the interests shared in common with foreign students.

Since the groups were accepted as being significantly different each response category was compared with every other category in order to determine which cells were contributing to the difference. Table 93 shows the three significant one-way comparisons that were obtained through these additional analyses.

**TABLE 93. SIGNIFICANT DIFFERENCES BETWEEN THE RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS CONCERNING THE INTERESTS THEY HAVE IN COMMON WITH FOREIGN STUDENTS**

Interests in common	Named		Not named	
	Observed	Expected	Observed	Expected
Academic	68	84.594	170	153.406
Cultural	66	49.406	73	89.594
Total	134	134	243	243
df and chi-square	1			13.69***
Academic	68	77.223	170	160.777
Other	54	44.777	84	93.223
Total	122	122	254	254
df and chi-square	1			4.44*
Cultural	66	53.211	73	85.789
People	130	142.789	243	230.211
Total	196	196	316	316
df and chi-square	1			6.83**

\*\*\* Significant at the .001 level of confidence.  
 \*\* Significant at the .01 level of confidence.  
 \* Significant at the .05 level of confidence.

As seen in Table 93 the chi-square comparison between the academic and cultural response categories was significant at the .001 level of confidence. Far more named students than expected indicated that they shared cultural interests in common with foreign students; and the students in the not

named group responded to the academic interests category more often than was expected.

In the second chi-square comparison more named students than expected responded to the broad category of "other" interests and the not named students again had more responses than expected in the academic category. The differences between the observed and expected frequencies in this analysis resulted in the chi-square value of 4.44 which indicated significant differences between the groups at the .05 level of confidence.

When the cultural response was compared to the general category of "people" in Table 93, the named group responded more frequently than expected to the cultural response and more students than expected in the not named group responded to the "people" category. The chi-square value of 6.83 obtained in this one-way analysis was significant at the .01 level of confidence.

The groups were accepted as being significantly different in each of the chi-square comparisons in Table 40 because the levels of significance were at the .05 level or above it.

d. In addition to analyzing the pattern of friendship between each American student and one foreign student friend, attempts were made to estimate the range of the American students' associations with other foreign students. Therefore, the students in both groups were asked if they had made friends with other foreign students. The responses to this question are shown in Table 94.



**TABLE 94. DIFFERENCES BETWEEN THE RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "HAVE YOU MADE FRIENDS WITH OTHER FOREIGN STUDENTS?"**

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Yes	142	135.305	295	301.695
No	6	12.695	35	28.305
Total	148	148	330	330
Degrees of freedom			1	
Chi-square			5.593*	

\* Significant at the .05 level of confidence.

Table 94 indicates that more students than expected in the named group had made friends with other foreign students; and fewer students than expected in the not named group had made friends with other foreign students. The chi-square table showed that the chi-square value of 5.593 with one degree of freedom was large enough to reach the .05 level of confidence. Since the differences were larger than would be expected purely through chance, it was concluded that there was a significant difference between the two groups in terms of their having met other foreign student friends.

e. In order to determine if students were prone to select foreign student friends from certain areas of the world they were asked, "Are your friends from other countries?" (countries other than the country of the friend first mentioned)

In the named group 142 students responded to this question and 295 of the students in the not named group responded. The results of these responses are shown in Table 95.

TABLE 95. DIFFERENCES BETWEEN THE RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS CONCERNING THE NATIONAL ORIGIN (IN TERMS OF WORLD REGION) OF THEIR OTHER FOREIGN STUDENT FRIENDS

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Same region	27	35.419	82	73.581
Other region	45	63.039	149	130.961
More than one region	70	43.542	64	90.428
Total	142	142	295	295
Degrees of freedom		2		
Chi-square		34.425*		

\*Significant at the .001 level of confidence.

Table 95 shows that fewer students than expected in the named group indicated that they had made friends with foreign students from just the same region--or from other regions; but more of these students than expected had made friends with foreign students from both the same region and from other regions of the world. More students than expected in the not named group indicated that their other foreign student friends were from the same region of the world as their

first foreign student friend, or from some other region of the world; but fewer students than expected in the not named group had made other friends from the "more than one region" category. With just one degree of freedom the chi-square value of 34.42 far exceeded the value of 9.21 needed to reach the .001 level of confidence. Because of this large divergence it was concluded that there was a significant difference between the two groups in terms of their ranges of associations with other foreign students.

One-way chi-square comparisons were computed to determine which cells were contributing to the significant difference in Table 95. Table 96 shows the results of the comparisons between each category.

**TABLE 96. SIGNIFICANT DIFFERENCES BETWEEN RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS CONCERNING THE ORIGIN (IN TERMS OF WORLD REGION) OF OTHER FOREIGN STUDENTS WITH WHOM THEY HAVE MADE FRIENDS**

Region	Named		Not named	
	Observed	Expected	Observed	Expected
Same region as close friend	27	43.510	82	65.490
Same region as close friend, plus others	70	53.490	64	80.510
Total	97	97	146	146
df and chi-square	1		18.90*	
A region different from their close friend	45	68.018	149	125.982
Same region as close friend, plus others	70	46.982	64	87.018
Total	115	115	213	213
df and chi-square	1		29.36*	

\*Significant at the .001 level of confidence.

According to the first comparison in Table 96 more named students than expected made friends from several regions of the world; and more students than expected in the not named group made friends with other foreign students from the same region of the world as the friend they mentioned at the beginning of the interviewing. These differences resulted in a chi-square value of 18.90 which was highly significant at the .001 level of confidence.

In the second comparison of Table 96 more named students than expected again associated with foreign students from more than one region of the world, while the not named group indicated more responses than expected in the "different region" category. The chi-square value of 29.36 obtained in this comparison was highly significant at the .001 level of confidence. The results of the chi-square analysis in Table 96 seemed to indicate that the students in the named group tended to have a larger range of foreign student friends, in terms of country of origin, than the students in the not named group. Although the not named students indicated that they did have other foreign student friends, the range tended to be limited to the same regional origin or to just one other world region.

f. It was believed that the range and extent of association with foreign students might in some way be related to the American students' previous experience with foreign people. Therefore, the students were asked the question, "Did you know any foreign people before you came to Indiana University?" The responses to this question are shown in Table 97.

**TABLE 97. DIFFERENCES BETWEEN THE RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "DID YOU KNOW ANY FOREIGN PEOPLE BEFORE YOU CAME TO INDIANA UNIVERSITY?"**

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Yes	129	122.921	268	274.079
No	19	25.079	62	55.921
Total	148	148	330	330
Degrees of Freedom			1	
Chi-square			2.570*	

\*Not significant at the .05 level of confidence.

Table 97 shows that more students than expected in the named group had known foreign people before they came to Indiana University; and fewer students than expected in the not named group had known foreign people previously. Referral to the chi-square table of values revealed, however, that with one degree of freedom the chi-square value of 2.570 failed to reach the .05 level of confidence. It was concluded, then, that there was no difference between the two groups on the basis of their having known other foreign people before they came to Indiana University.

g. The students who answered affirmatively to the question of knowing foreign people previously were also asked, "Where did you know them?" The responses of the students to this question were grouped into six major categories, and these responses are shown in Table 98.



TABLE 98. DIFFERENCES BETWEEN THE RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "WHERE DID YOU KNOW OTHER FOREIGN PEOPLE?"

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Home community	54	55.634	115	113.366
Other schools	95	103.137	218	209.963
Travel	27	23.702	45	48.298
Overseas	23	19.093	35	38.907
Family	8	4.609	6	9.391
Other	5	5.925	13	12.075
Total	212	212	432	432
Degrees of Freedom		5		
Chi-square		6.817*		

\*Not significant at the .05 level of confidence.

Table 98 shows that not as many students in the named group as expected had known other people in their home community or in other schools. More students in this group, however, had known foreign people through travel, while overseas, or through their families. The students in the not named group responded more than expected to the home community, and other schools category, but they had fewer responses than expected in the travel, overseas, and family categories. The chi-square value of 6.817 with five degrees of freedom, however, failed to reach the .05 level of confidence. It was

concluded that the differences in responses to this question could be attributed to chance fluctuation and that the populations were not significantly different.

h. Although the two groups of students did not differ in terms of their previous experiences with foreign people, a comparison of their fluency with foreign languages did show significant differences. Table 99 shows the responses of students in both groups on the question, "Have you conversed with foreign students in any language other than English?"

TABLE 99. DIFFERENCES BETWEEN THE RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "HAVE YOU CONVERSED WITH FOREIGN STUDENTS IN ANY LANGUAGE OTHER THAN ENGLISH?"

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Yes	57	43.347	83	95.653
No	63	81.741	201	182.259
A little	28	22.912	46	51.088
Total	148	148	330	330
Degrees of Freedom	2			
Chi-square	14.088*			

\*Significant at the .001 level of significance.

According to Table 99 more students than expected in the named group had conversed with foreign students in other languages; and more than expected had conversed "a little" in other languages. Fewer students than expected in the not named group indicated that they had conversed with foreign students in other languages, and more than expected indicated that they had not conversed with foreign students in other languages. Referral to the chi-square table of values showed that the obtained chi-square table of values showed that the obtained chi-square value of 14.088 with two degrees of freedom exceeded the .001 level of confidence. Therefore, it was concluded that there was a very significant difference between the two groups on the basis of the proportion of students who had conversed with foreign students in a language other than English.

Additional one-way chi-square comparisons were computed to determine which of the cells were contributing to the difference. Table 100 shows the results of these analyses.

**TABLE 100. SIGNIFICANT DIFFERENCES BETWEEN RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "HAVE YOU CONVERSED WITH FOREIGN STUDENTS IN ANY LANGUAGE OTHER THAN ENGLISH?"**

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Yes	57	41.584	83	98.416
No	63	78.416	201	185.584
Total	120	120	284	284
df and chi-square	1		12.44**	
No	63	71.077	201	192.923
A little	28	19.923	46	54.077
Total	91	91	247	247
df and chi-square	1		5.73*	

\*\* Significant at the .001 level of confidence.

\* Significant at the .05 level of confidence.

Table 100 shows that more named students than expected had conversed in foreign languages, and fewer students than expected in the not named group had conversed with foreign students in other languages. The chi-square value of 12.44 for the first one-way comparison was highly significant at the .001 level of confidence.

The second one-way comparison shows that more students than expected in the named group had conversed in another language "a little"; but fewer not named students than expected indicated that they conversed "a little" in another language.

With one degree of freedom the obtained chi-square value of 5.73 was found to be significant at the .05 level of confidence.

Since both of the one-way analyses shown in Table 100 were significant at the .05 level or above, the groups were accepted as being significantly different in terms of their having conversed in a foreign language.

i. In addition to ascertaining the extent of conversation among the students an effort was made to discover what languages were being spoken. Therefore, a follow-up question was asked concerning what languages were being spoken by the American students in their conversations with foreign students.

The languages used by American students were categorized according to the following groups: (a) foreign student's language, (b) French or Spanish, and (c) other languages. The results of these responses are shown in Table 101.

TABLE 101. DIFFERENCES BETWEEN THE RESPONSES OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS CONCERNING THE LANGUAGES USED IN CONVERSING WITH FOREIGN STUDENTS

Language	Named		Not named	
	Observed	Expected	Observed	Expected
Foreign student's language	43	35.748	47	54.252
French or Spanish	12	15.093	26	22.907
Other languages	30	34.159	56	51.841
Total	85	85	129	129
Degrees of freedom		2		
Chi-square		4.332*		

\* Not significant at the .05 level of confidence.

As seen in Table 101 more named students than expected had conversed with foreign students in their native language; and fewer of these students than expected had conversed in French or Spanish or "other" languages. Fewer students in the not named group than expected conversed in a foreign student's language, but more of these students than expected had spoken in French or Spanish or "other" languages. The chi-square value of 4.332 with two degrees of freedom was not large enough to reach the .05 level of confidence and it was concluded that there were no significant differences between the two groups in terms of the foreign languages that they used when conversing with foreign students.



Summary of cross-cultural patterns of friendship. In order to determine the origin and development of cross-cultural friendships the American students in the named and not named populations were asked nine questions concerning their friendships with foreign students. Consequently, through chi-square analyzes it was found that these two groups of students differed significantly on six of these nine questions. The six questions on which the two groups differed were:

1. How did you first meet this foreign student friend?
2. Where do you usually get together?
3. What interests do you have in common?
4. Have you made friends with other foreign students?
5. Are your friends from other countries? (other than the friend first mentioned)
6. Have you conversed with foreign students in any language other than English?

The three questions on which the groups did not differ were:

1. Did you know any foreign people before you came to Indiana University?
2. Where did you know other foreign people?
3. What other languages have you used in conversing with foreign students?

On the first question which was concerned with how the American students had first met their foreign student friends, the greatest statistical differences were found to be in the categories of academic areas, residence halls, and socially. More named students than expected had met their foreign student friends in the residence halls or socially, while more of the not named students than expected had met their friends

in the academic areas. The responses to this question seemed to indicate that the students in the named group had made the initial contact with foreign students in situations where the association would be voluntary and by choice, whereas the students in the not named group met foreign students more often than expected in situations which were structured primarily for academic purposes, and the choice of associates was predetermined.

It was also revealed that the named students associated with their foreign student friends more often than expected in the residence halls, socially, or in activities, as compared to the not named students who got together with their foreign student friends more often than expected in academic situations.

When the students were asked what interests they had in common with their foreign student friends, the named students indicated that they shared cultural and religious interests more often than expected; but the not named students shared academic interests and interest in people in common with foreign students.

The differences between the two groups in terms of having made other foreign student friends showed that the named students made other friends more often than expected while the not named students had made friends less often than expected in the chi-square ratio. Also, it was revealed that the other friends of the named students came from several regions of the world but the not named students tended to make friends from

the same region of the world as their first friend that they mentioned or from just one other region of the world.

It was also shown through the chi-square ratio that more of the named students than expected had conversed with foreign students in a language other than English; but fewer of the not named students than expected had conversed in other languages.

2. A major aspect of this investigation centered upon the feelings, opinions, and beliefs that the American students held about the foreign students. Of particular concern was the American students' perceptions of how the foreign students differed from American students. Furthermore, American students' opinions were sought in regard to what the foreign students think about Americans in general.

a. The American students' perceptions of foreign students were obtained by asking the open-ended question, "How would you say they differ from American students?" Because of the fact that this question was open-ended, students responded with a variety of opinions and impressions of the foreign students. Therefore, the responses to this question were grouped into four major categories: (a) socially, (b) culturally, (c) intellectually, and (d) in age and maturity. Most of the responses to this question indicated that the foreign students differed in some degree (had more or less of a trait than American students), or that they had different attributes from American students. For example, in reference to religion,

(which was included in the cultural category) it was possible to obtain responses indicating that foreign students were: (a) more religious than American students, (b) not as religious as American students, or (c) had religious beliefs that were different from American students. Because of these differentiated responses the categories were coded in terms of being: (a) more, (b) less, or (c) different.

Table 102 shows the responses to how American students thought foreign students differed from American students socially.

TABLE 102. DIFFERENCES BETWEEN RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "HOW DO YOU THINK FOREIGN STUDENTS DIFFER FROM AMERICAN STUDENTS SOCIALLY?"

Response	Named		Not Named	
	Observed	Expected	Observed	Expected
More social	73	41.891	58	89.109
Less social	17	25.262	62	53.738
Different socially	138	160.847	365	342.153
Total	228	228	485	485
Degrees of freedom		2		
Chi-square		42.707*		

\*Significant at the .001 level of confidence.

Table 102 indicates that more students than expected in the named group felt that foreign students were more socially inclined than American students, and fewer than expected felt that foreign students were less socially inclined than American students. Also, fewer students in this group felt that foreign students were different socially from American students. In the not named group fewer students than expected saw foreign students as being more socially inclined than American students, and more not named students than expected saw foreign students as being less social, and different socially from American students. With two degrees of freedom the chi-square value of 42.707 far exceeded the 13.82 value needed to reach the .001 level of confidence. This extreme divergence indicated that there was a significant difference between the two groups on the question of how foreign students differ from American students socially.

Because of the highly significant difference found in Table 102 additional one-way comparisons were computed to determine which of the cells were contributing to the difference. The significant chi-square tables resulting from the one-way comparisons are presented in Table 103.

TABLE 103. SIGNIFICANT DIFFERENCES BETWEEN RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS CONCERNING HOW FOREIGN STUDENTS DIFFER FROM AMERICAN STUDENTS SOCIALLY

Response	Named		Not Named	
	Observed	Expected	Observed	Expected
More social	73	56.143	58	74.857
Less social	17	33.857	62	45.143
Total	90	90	120	120
df and chi-square	1	23.54*		
More social	73	43.598	58	87.402
Different socially	138	167.402	365	335.598
Total	211	211	423	423
df and chi-square	1	37.45*		

\*Significant at the .001 level of confidence.

The results of the first chi-square comparison in Table 103 show that more students than expected in the named group saw the foreign students as being more socially inclined than American students. More of the not named students than expected saw the foreign students as being less socially inclined than the American students. With one degree of freedom the chi-square value of 23.54 was found to be highly significant at the .001 level of confidence.

In the second comparison more named students than expected saw the foreign students as being more social, and fewer of these students than expected saw the foreign students



as being socially different. Fewer not named students than expected saw the foreign students as being more social than Americans, but far more of these students than expected felt that foreign students were different socially. Referral to the chi-square table of values revealed that the value of 37.45 greatly exceeded the value of 10.83 needed to reach the .001 level of confidence.

Because of the extreme differences found in Table 103 it appeared that the students in both groups had rather definite impressions about the social inclinations of the foreign students. The named group seemed to feel that foreign students enjoyed social interaction, but the not named students indicated that the foreign students were more inclined to be less sociable than American students.

In the second major category of responses to the question on how foreign students differ from American students, 80 students in the named group and 88 students in the not named group indicated how they thought foreign students differed from American students culturally. The results of these responses are shown in Table 104.

TABLE 104. DIFFERENCES BETWEEN THE RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "HOW DO FOREIGN STUDENTS DIFFER FROM AMERICAN STUDENTS CULTURALLY?"

Response	Named		Not named	
	Observed	Expected	Observed	Expected
More cultural	50	40.952	36	45.048
Less cultural	7	5.714	5	6.286
Different culturally	23	33.333	47	36.667
Total	80	80	88	88
Degrees of freedom		2		
Chi-square		10.483*		

\* Significant at the .01 level of confidence.

Table 104 shows that the observed frequency for students in the named group is greater than expected for attributing more cultural traits to foreign students as compared to American students. The frequencies are also slightly greater than expected for attitudes indicating that foreign students are less cultural than Americans. Fewer students in the named group, however, felt that foreign students differed from Americans culturally (had different traits--but not more or less than Americans). In the not named group fewer students than expected indicated that foreign students were more cultural, and less cultural. Also, more students than expected in the not named group indicated that foreign students are different culturally, but they did not specify in what degree they were

different. Referral to the chi-square table of values showed that with two degrees of freedom the chi-square value of 10.483 exceeded the .01 level of confidence. It was concluded therefore, that the two groups were significantly different in their perception of foreign students' cultural attributes.

Because the groups were accepted as being significantly different, one-way comparisons were calculated to determine which of the cells in Table 105 were contributing to the difference. The one-way significant comparisons resulting from the additional calculations are shown in Table 105.

TABLE 105. SIGNIFICANT DIFFERENCES BETWEEN RESPONSES OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS CONCERNING HOW THEY THINK FOREIGN STUDENTS DIFFER FROM AMERICAN STUDENTS CULTURALLY

Response	Named		Not named	
	Observed	Expected	Observed	Expected
More cultural	50	40.244	36	45.756
Different culturally	23	32.756	47	37.244
Total	73	73	83	83
df and chi-square	1	9.90*		

\*Significant at the .01 level of confidence.

As seen in Table 105 the named students indicated more often than expected that the foreign students were more cultural than American students; but the not named students indicated more often than expected that the foreign students were culturally

different from the American students. The differences in responses resulted in a chi-square value of 9.90 which was significant at the .01 level of confidence.

The responses of how American students thought foreign students differed from American students intellectually showed a different trend than those noticed in the social and cultural attributes and Table 106 shows the results of this category.

TABLE 106. DIFFERENCES BETWEEN THE RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION OF HOW THEY THINK FOREIGN STUDENTS DIFFER FROM AMERICAN STUDENTS INTELLECTUALLY

Response	Named		Not named	
	Observed	Expected	Observed	Expected
More intellectual	61	85.175	70	45.825
Less intellectual	53	39.662	8	21.338
Different intellectually	57	46.163	14	24.837
Total	171	171	92	92
Degrees of freedom			2	
Chi-square			39.710*	

\*Significant at the .001 level of confidence.

Table 106 shows that fewer students in the named group than expected thought that foreign students were more intellectual than American students; and more students than expected in this group thought that they were less intellectual. Also,

more named students than expected indicated that foreign students differed from Americans intellectually, but they did not specify how they differed. In the not named group more students than expected indicated that foreign students were more intellectual. Fewer students than expected in this group felt that foreign students were less intellectual, and fewer also felt that they differed intellectually from Americans. This category of "different intellectually" included such responses as: "Foreign students study differently than we do;" "Foreign students have different intellectual backgrounds from American students;" and "Foreign students feel differently about education."

The chi-square value of 39.71 with two degrees of freedom was so much larger than the 13.82 needed to reach the .001 level of confidence that it was concluded that this difference could not be due to chance fluctuation of the populations. It was concluded therefore, that the two groups were significantly different in terms of how they perceived the intellectual characteristics of foreign students.

In order to determine which of the cells in Table 106 were contributing to the significant difference, one-way comparisons were computed. Table 107 shows the significant chi-square tables that resulted from the comparisons.

TABLE 107. SIGNIFICANT DIFFERENCES BETWEEN RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS CONCERNING HOW THEY THINK FOREIGN STUDENTS DIFFER FROM AMERICAN STUDENTS INTELLECTUALLY

Response	Named		Not named	
	Observed	Expected	Observed	Expected
More intellectual	61	77.781	70	53.219
Less intellectual	53	36.219	8	24.781
Total	114	114	78	78
df and chi-square	1			28.05*
More intellectual	61	76.525	70	54.475
Different intellectually	57	41.475	14	29.525
Total	118	118	84	84
df and chi-square	1			21.54*

\*Significant at the .001 level of confidence.

The first single comparison in Table 107 shows that fewer students than expected in the named group saw foreign students as being more intellectual than American students. On the other hand, more students than expected in the not named group saw the foreign students as being more intellectual than American students. A chi-square value of 28.05 was obtained in this contingency table and this value indicated that the two groups were significantly different at the .001 level of confidence.



In the second chi-square comparison of Table 107 fewer named students than expected indicated that foreign students were more intellectual than American students, but more students in this group than expected saw the foreign students as being different intellectually. The not named students responded more frequently than expected to the "more intellectual" category but fewer of these students than expected felt that the foreign students were "different intellectually." With one degree of freedom the chi-square value of 21.54 exceeded the .001 level of confidence.

A summary of Table 107 shows that although the named students did not see foreign students as being more intellectual than American students, they did differentiate background characteristics and differences in the foreign students' intellectual attributes. The not named students were rather strong in their belief that foreign students were more intellectual than American students.

The fourth and final category of responses was entitled "age and maturity." When the variety of similar responses was compiled under this category a total of 157 remarks were listed by the named population and 207 responses were reported by the students in the not named group. The "age and maturity" category of responses is shown in Table 108.

**TABLE 108. DIFFERENCES BETWEEN THE RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION CONCERNING HOW THEY THINK FOREIGN STUDENTS DIFFER FROM AMERICAN STUDENTS IN AGE AND MATURITY**

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Older and more mature	140	138.022	180	181.978
Younger and less mature	9	10.352	15	13.648
Different in age and maturity	8	8.626	12	11.374
Total	157	157	207	207
Degrees of freedom		2		
Chi-square		0.440*		

\* Not significant at the .05 level of confidence.

According to Table 108 more students than expected in the named group indicated that foreign students were older and more mature, while fewer students than expected felt that they were younger and less mature. In the not named group the frequencies were almost equal but slightly fewer students than expected felt that foreign students were older and more mature, and several more than expected indicated that foreign students were younger and less mature. The differences between the two groups were so small that the chi-square value of 0.440 with two degrees of freedom indicated that the groups did not differ significantly in terms of their perceptions of foreign students' ages and maturity.

This category of "age and maturity" was the only one which did not show significant differences between the two groups on the question, "How do they (foreign students) differ from American students?" A brief summary of the three significantly different categories shows that the students in the named group perceived the foreign students to be more cultural and more sociable, but less intellectual than American students. The students in the not named group perceived the foreign students to be more intellectual, but less cultural and less sociable than American students.

b. In addition to these perceptions of the American students, efforts were made to ascertain how the American students perceived the foreign students' understanding of the American people. The answers to the question, "Do you think the foreign students really get to know us?" were grouped into five major categories and the results are shown in Table 109.

**TABLE 109. DIFFERENCES BETWEEN THE RESPONSES OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "DO YOU THINK FOREIGN STUDENTS REALLY GET TO KNOW AMERICANS?"**

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Yes	28	22.538	44	49.462
No	25	37.563	95	82.437
Incompletely	15	17.216	40	37.784
Some do, and some don't	75	65.987	138	147.013
Don't know	5	4.695	10	10.305
Total	148	148	327	327
Degrees of freedom			4	
Chi-square			10.252*	

\* Significant at the .05 level of confidence.

As seen in Table 109 more students than expected in the named group felt that foreign students do get to know Americans, and more of these students than expected indicated that some foreign students get to know us and some do not. Fewer of the named students than expected indicated that they thought foreign students did not really get to know us. In the not named group far more students than expected felt that foreign students did not get to know us; and fewer students than expected in the not named group indicated that they thought foreign students really did get to know us.

With four degrees of freedom the chi-square value of 10.25 was larger than the value of 9.45 at the .05 level of confidence. Therefore, it was concluded that there was a significant difference between the two groups at the .05 level of confidence.

Additional chi-square comparisons were computed in order to determine which of the cells in Table 109 were contributing to the significant difference. Table 110 presents the one-way chi-square comparisons which were significant.

TABLE 110. SIGNIFICANT DIFFERENCES BETWEEN RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "DO YOU THINK FOREIGN STUDENTS REALLY GET TO KNOW US?"

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Yes	28	19.875	44	52.125
No	25	33.125	95	86.875
Total	53	53	139	139
df and chi-square	1	7.34*		
No	25	36.036	95	83.964
Some do, and some don't	75	63	138	149.036
Total	100	100	233	233
df and chi-square	1	7.55*		

\* Significant at the .01 level of confidence.

The first contingency table of Table 110 shows that more students than expected in the named group felt that foreign students really get to know Americans. More students than expected in the not named group felt that foreign students did not get to know us. The chi-square value of 7.34 with one degree of freedom was significant at the .01 level of confidence.

In the second contingency table the ratio shows that fewer students than expected in the named group responded negatively to the question, while more of these students than expected felt that some foreign students do get to know us and some do not. More not named students than expected felt that foreign students do not get to know Americans; and fewer not named students than expected said that some foreign students do get to know us and others do not. The chi-square value of 7.55 exceeded the .01 level of confidence and therefore, the groups were accepted as being significantly different.

From an analysis of both chi-square comparisons in Table 110 it was concluded that the named students were more inclined to feel that the foreign students do get to know Americans and the not named students were more inclined to feel that they do not get to know us.

c. A succeeding question was asked in the interview in order to elicit the American students' reactions to foreign students' attitudes toward Americans. The responses to the question, "What do foreign students think of us?", were grouped into five main categories and the responses are shown in Table 111.



**TABLE 111. DIFFERENCES BETWEEN THE RESPONSES OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "WHAT DO FOREIGN STUDENTS THINK OF US(AMERICANS)?"**

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Like	66	60.224	116	121.776
Indifferent	5	7.280	17	14.720
Dislike	5	10.258	26	20.742
Some like and some dislike	47	42.355	81	85.645
Do not let us know	13	15.883	35	32.117
Total	136	136	275	275
Degrees of freedom		4		
Chi-square		7.466*		

\*Not significant at the .05 level of confidence.

Table 111 shows that the observed frequencies were greater than expected for the named group in the "like" and "some like/some dislike" categories, but they were less than expected in the "indifferent," "dislike," and "Do not let us know" categories. In the not named group the observed frequencies were less than expected in the "like" and "some like/some dislike" categories, and more than expected in the "indifferent," "dislike," and "Do not let us know" categories. These differences between the named and not named groups might have indicated that the students in the named group perceived a more

favorable reaction from the foreign students than the students in the not named group did, but referral to the chi-square table of values revealed that the chi-square value of 7.466 with four degrees of freedom did not reach the .05 level of confidence. Thus, it was concluded that there were no differences between the two groups on their perceptions of foreign students' attitudes toward Americans.

Summary of American students' perceptions of foreign students. An analysis of the three questions concerning American students' perceptions of foreign students showed significant differences between the named and not named populations on two of these questions. The questions which reflected significant differences were:

1. How would you say they (foreign students) differ most from American students?
2. Do you think foreign students really get to know us (Americans)?

The question which did not show significant differences was:

1. What do foreign students think of us (Americans)?

The named students saw the foreign students as being more cultural and more sociable, but less intellectual than American students; and they were inclined to feel that foreign students really did get to know Americans.

Students in the not named group indicated that foreign students were less cultural and less sociable, but more intellectual than American students. Also, these students felt that foreign students did not really get to know Americans.

3. One important objective of this investigation was to determine in what ways, if any, the American students had been affected by their association with foreign students. It was believed that the influence of the foreign students on the American students would manifest itself in three areas of the students' lives. These three areas were their interests, attitudes, and their future plans. Therefore, in order to measure the extent of the foreign students' influence, one question on each of these areas was included in the personal interviews.

The first question asked in regard to the influence of the foreign students was, "Have you developed any new interests?" In answer to this question there were 262 responses from the students in the named group and 396 responses from the students in the not named group. The responses were categorized into five major categories and one general category of "other." The chi-square comparison between the two groups of students on the responses is shown in Table 112.

**TABLE 112. DIFFERENCES BETWEEN THE RESPONSES OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "HAVE YOU DEVELOPED ANY NEW INTERESTS?"**

Interests	Named		Not named	
	Observed	Expected	Observed	Expected
Languages and geography	29	35.040	59	52.960
Culture	46	48.179	75	72.821
Broadened generally	82	81.626	123	123.374
Foreign affairs	26	27.076	42	40.924
Government and politics	46	36.234	45	54.766
Other	33	33.845	52	51.155
Total	262	262	396	396
Degrees of freedom			5	
Chi-square			6.376*	

\*Not significant at the .05 level of confidence.

Table 112 shows that more students than expected in the named group gained new interests in government and politics as a result of knowing foreign students, but not as many as expected gained any new interest in languages and geography. The responses of the students in the not named group indicated that more students than expected gained new interests in languages and geography, but fewer students than expected gained any new interests in government and politics. There was very little divergence between the observed and expected

frequencies in the categories of culture, broadened generally, foreign affairs, and "other." The chi-square value of 6.376 with five degrees of freedom was not large enough to reach the .05 level of confidence, and it was concluded that there was no significant difference between the two groups in their development of new interests as a result of their friendships with foreign students.

For the second question concerning the influence of the foreign students on the American students, the students were asked, "Has knowing foreign students changed your attitudes on any question at home or abroad?" Table 113 shows that there were 169 responses from students in the named group and 247 responses from the students in the not named group in reply to this question.

TABLE 113. DIFFERENCES BETWEEN THE RESPONSES OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "HAS KNOWING FOREIGN STUDENTS CHANGED YOUR ATTITUDES ON ANY QUESTION AT HOME OR ABROAD?"

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Race and religion	8	8.938	14	13.063
Foreigners	61	65.813	101	96.188
International affairs	54	46.719	61	68.281
United States values	17	17.875	27	26.125
Other	29	29.656	44	43.344
Total	169	169	247	247
Degrees of freedom		4		
Chi-square		2.766*		

\*Not significant at the .05 level of confidence.

As seen in Table 113 there is little difference between the observed and expected frequencies for the named group in three of the categories; race and religion, United States values, and "ether." The frequencies were less than expected, however, in the "foreigners" category and more than expected for "international affairs." Students in the not named group indicated observed frequencies greater than expected in all categories except in the category of "international affairs", which had an observed frequency that was less than expected. In spite of these differences the chi-square value of 2.766



with four degrees of freedom failed to reach the .05 level of confidence and it was concluded that there were differences between the two groups in terms of attitude changes.

In response to the question, "Have you changed any of your plans for the future?" 86 named students and 141 not named students indicated tentative changes. Table 114 shows the categories and responses for the students' changes in future plans.

**TABLE 114. DIFFERENCES BETWEEN THE RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "HAVE YOU CHANGED ANY OF YOUR PLANS FOR THE FUTURE?"**

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Travel	48	53.797	94	88.203
Courses and languages	14	9.850	12	16.150
Vocations	12	10.987	17	18.013
Peace Corp and "other"	12	11.366	18	18.634
Total	86	86	141	141
Degrees of freedom				3
Chi-square				4.027*

\* Not significant at the .05 level of confidence.

Table 114 shows that fewer students in the named group than expected had changed plans for future traveling; but more students than expected had changed plans concerning courses and languages, vocations, and the Peace Corp and "other." With three degrees of freedom the chi-square value of 4.027 failed to reach the .05 level of confidence. Thus, it was concluded that there were no significant differences between the two groups in regards to their changed plans for the future.

Summary of the extent and influence of foreign students on American students. An analysis of the three preceding tables showed that there were no significant differences between the named and not named populations on any of the questions pertaining to the influence of foreign students on American students. The fact that not one question elicited significant different responses between the groups seemed to indicate that the influence of the foreign students was no greater on their close friends than it was on students who they associated with in classes and in the residence halls.

4. It was believed that some American students might be influenced by the attitudes of other Americans toward foreign students.

a. Therefore, in order to determine the influence of peer group pressure, the following question was asked, "How do other Americans react to American students associating with foreign students?" In answer to this question, most students in both groups responded with reference to how they thought other Americans felt about friendships in general, and about

foreign and American student dating relationships. In reference to friendships, 133 students in the named group and 301 students in the not named group responded. Table 115 shows the students' responses to how they think other Americans react to friendships with foreign students.

**TABLE 115. DIFFERENCES BETWEEN THE RESPONSES OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS CONCERNING HOW THEY THINK OTHER AMERICANS VIEW THEIR FRIENDSHIP WITH FOREIGN STUDENTS**

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Favorable	65	59.145	128	133.855
Indifferent	61	65.274	152	147.726
Unfavorable	7	8.581	21	19.419
Total	133	133	301	301
Degrees of freedom			2	
Chi-square			1.659*	

\* Not significant at the .05 level of confidence.

According to Table 115 more students in the named group than expected indicated that other Americans were favorable toward friendships with foreign students. Fewer students than expected in this group felt that other Americans were indifferent or had unfavorable reactions to cross-cultural friendships. The observed frequency was less than expected in the not named group for the "favorable" response and it was greater

than expected for the "indifferent" and "unfavorable" responses. With two degrees of freedom the chi-square value of 1.659 failed to reach the .05 level of confidence, however, and it was concluded that there were no significant differences between the two groups in their perceptions of how other Americans view friendships with foreign students.

b. As a second response to the question concerning how other Americans view friendships with foreign students, 73 students in the named group and 186 students in the not named group responded in terms of attitudes toward a cross-cultural dating relationship. Table 116 shows the comparison of responses of attitudes toward dating.

**TABLE 116. DIFFERENCES BETWEEN THE RESPONSES OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS CONCERNING HOW THEY THINK OTHER AMERICANS VIEW A DATING RELATIONSHIP WITH FOREIGN STUDENTS**

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Favorable	15	9.583	19	24.417
Indifferent	30	25.367	60	64.633
Unfavorable	28	38.050	107	96.950
Total	73	73	186	186
Degrees of freedom		2		
Chi-square		9.138*		

\* Significant at the .05 level of confidence.

As seen in Table 116 more students than expected in the named group indicated that other Americans were favorable toward cross-cultural dating relationships. Fewer named students than expected felt that other Americans were unfavorable toward foreign and American students' dating. In the not named group fewer students than expected responded that other Americans were favorable, or indifferent toward cross-cultural dating, and more students than expected in this group indicated that other Americans were unfavorable to the dating relationship. The chi-square value of 9.138 with two degrees of freedom exceeded the value needed to reach the .05 level of confidence and therefore it was concluded that there was a significant difference between the two groups in their perceptions of how other Americans view cross-cultural dating relationships.

In order to determine which cells in Table 116 were contributing to the significant difference, additional one-way comparisons were computed; and Table 117 shows the chi-square contingency tables that were significant.

**TABLE 117. SIGNIFICANT DIFFERENCES BETWEEN RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS CONCERNING HOW THEY THINK OTHER AMERICANS VIEW CROSS-CULTURAL DATING RELATIONSHIPS**

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Favorable	15	8.651	19	25.349
Unfavorable	28	34.349	107	100.651
Total	43	43	126	126
df and chi-square	1	7.82**		
Indifferent	30	23.200	60	66.800
Unfavorable	28	34.800	107	100.20
Total	58	58	167	167
df and chi-square	1	4.47*		

\*\* Significant at the .01 level of confidence.

\* Significant at the .05 level of confidence.

In the first chi-square comparison of Table 117 more students than expected in the named group responded that other Americans were favorable to cross-cultural dating relationships. More students than expected in the not named group indicated that other Americans were unfavorable toward cross-cultural dating. With one degree of freedom the obtained chi-square value of 7.82 exceeded the .01 level of confidence and the groups were accepted as being significantly different.

In the second contingency table of Table 117 more students than expected in the named group indicated that other



Americans were indifferent toward cross-cultural dating, and fewer of these students than expected felt that other Americans were unfavorable toward cross-cultural dating. On the other hand, fewer students than expected in the not named group felt that Americans were indifferent toward cross-cultural dating, and more of these students than expected indicated that other Americans were unfavorable towards it. The differences between the two groups resulted in a chi-square value of 4.47 which was significant at the .05 level of confidence. Thus, it was concluded that there was a significant difference between the two groups of students in their perceptions of other Americans' attitudes toward cross-cultural dating relationships.

Summary of American students' perceptions of other Americans' attitudes. The chi-square analyses in Tables 115, 116, and 117 showed just one significant difference between the students' perceptions of other Americans' reactions to friendships with foreign students. There was no significant difference between the perceptions of named and not named students in terms of how they thought other Americans viewed casual friendships; but there was a significant difference in terms of how they thought other Americans viewed cross-cultural dating relationships. Students in the named group perceived other Americans' reactions as being favorable, or at least, indifferent to cross-cultural dating, but the not named students perceived other Americans as viewing this type of relationship unfavorably.

5. In the interview two questions were asked concerning the American students' attitudes toward helping foreign students financially. The first question dealt with students' attitudes toward extending federal government aid to foreign students, and the second question focused on a state university's financial support of foreign students.

a. On the first question 145 named students and 320 not named students expressed opinions. Table 118 shows the attitudes of the students on the question, "Do you think the federal government should give financial aid to foreign students?"

**TABLE 118. DIFFERENCES BETWEEN THE RESPONSES OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "DO YOU THINK THE FEDERAL GOVERNMENT SHOULD GIVE FINANCIAL AID TO FOREIGN STUDENTS?"**

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Approve	108	112.258	252	247.742
Indifferent	13	8.731	15	19.269
Disapprove	24	24.011	53	52.989
Total	145	145	320	320
Degrees of freedom			2	
Chi-square			3.267*	

\* Not significant at the .05 level of confidence.

According to Table 118 fewer students in the named group than expected indicated that they approve of federal aid for foreign students. A few more students than expected were indifferent to the idea of federal aid and the observed frequency in the disapproval category for the named group was equal to the expected frequency. More not named students than expected approved of federal aid, while less than expected indicated that they were indifferent to the idea. The observed and expected frequencies for the disapproval category were almost equal for the students in the not named group. With two degrees of freedom, however, the chi-square value of 3.267 was not large enough to reach the .05 level of confidence and it was concluded that there were no significant differences between

the two groups in their attitudes towards federal aid to foreign students.

b. For the second question on financial aid, students in both groups were asked, "Should Indiana University, a state supported university, help foreign students financially?" The results to this question are shown in Table 119.

**TABLE 119. DIFFERENCES BETWEEN THE RESPONSES OF STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "SHOULD INDIANA UNIVERSITY, A STATE SUPPORTED UNIVERSITY, HELP FOREIGN STUDENTS FINANCIALLY?"**

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Approve	94	98.639	232	227.361
Indifferent	15	9.682	17	22.318
Disapprove	32	32.678	76	75.332
Total	141	141	325	325
Degrees of freedom		2		
Chi-square		4.520*		

\* Not significant at the .05 level of confidence.

Table 119 shows that the observed frequency for the named students was less than expected for the "approve" category, and greater than expected for the "indifferent" category. The observed and expected frequencies were almost equal for the category labeled "disapprove". In the not named

group the frequency was greater than expected for approving of aid for foreign students and less than expected for feeling "indifferent" about the idea. Again, as with the named group, the not named students' observed frequency for the "disapprove" category was almost equal to the expected frequency. With two degrees of freedom the chi-square value of 4.520 did not reach the .05 level of confidence and the conclusion was that the two groups were not significantly different on this question.

It might be noted here that although the differences between the two groups were not significant, the extent of the frequencies favoring aid to foreign students seemed to indicate rather strong positive attitudes on the part of American students to help foreign students financially through the federal government and the university.

6. The last three questions of the interview pertained to the students' opinions of the over-all housing arrangements, personal difficulties, and the possible solutions for these difficulties of the foreign students.

a. On the first question 135 named students and 309 not named students expressed opinions on the arrangements for foreign students. The responses are presented in Table 120 to the question, "What do you think of the over-all arrangements for foreign students here at Indiana University?"

**TABLE 120. DIFFERENCES BETWEEN THE RESPONSES OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "WHAT DO YOU THINK OF THE OVER-ALL ARRANGEMENTS FOR FOREIGN STUDENTS HERE AT INDIANA UNIVERSITY?"**

Response	Named		Not named	
	Observed	Expected	Observed	Expected
Good	94	100.338	236	229.662
Fair	21	20.372	46	46.628
Poor	5	5.169	12	11.831
Do not know	15	9.122	15.	20.878
Total	135	135	309	309
Degrees of freedom			3	
Chi-square			6.054*	

\* Not significant at the .05 level of confidence.

Table 121 shows that the observed frequency for the named group was less than expected for the response "good", while the frequencies for "fair" and "Do not know" were slightly more than expected. In the not named group more students than expected indicated that the arrangements were "good", and "poor"; but fewer students than expected indicated that they did not know about the arrangements. The chi-square value of 6.054 with three degrees of freedom, however, was too small to reach the .05 level of confidence. Because the differences were so small they were attributed to chance fluctuation and it was concluded that there were no significant differences between the two groups in their opinions about the over-all arrangements for foreign students on the campus.



b. For the second question in this series the students were asked, "What difficulties do you think foreign students have?", and the responses are shown in Table 121.

TABLE 121. DIFFERENCES BETWEEN THE RESPONSES OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "WHAT KIND OF DIFFICULTIES DO YOU THINK FOREIGN STUDENTS HAVE?"

Responses	Named		Not Named	
	Observed	Expected	Observed	Expected
Language	105	110.896	246	240.104
Loneliness	128	124.797	267	270.203
Customs	45	49.287	111	106.713
Homesickness	25	18.641	34	40.359
Prejudice	17	18.325	41	39.675
Fears	7	5.055	9	10.945
Total	327	327	708	708
Degrees of freedom			5	
Chi-square			5.529*	

\* Not significant at the .05 level of confidence.

As seen in Table 121 the students in the named group mentioned more frequently than expected the difficulties of loneliness, homesickness, and fears; and the difficulties of language, prejudice, and customs were mentioned less often than expected. In the not named group the observed frequencies for language, prejudice, and customs were listed more often

than expected. With five degrees of freedom the chi-square value of 5.529 was not large enough to reach the .05 level of confidence and it was concluded that there was no difference between the two groups in their opinions of the foreign students' difficulties.

c. The final question in the interview was, "What can be done to help foreign students (with their problems)?" The students' responses were categorized as shown in Table 122.

**TABLE 122. DIFFERENCES BETWEEN THE RESPONSES OF THE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS ON THE QUESTION, "WHAT CAN BE DONE ABOUT THEIR PROBLEMS?"**

Response	Named		Not named	
	Observed	Expected	Observed	Expected
More orientation	57	55.283	121	122.717
Higher standards	18	20.809	49	46.191
More counseling	16	14.908	32	33.092
Total	91	91	202	202
Degrees of freedom		2		
Chi-square		0.743*		

\*Not significant at the .05 level of confidence.

According to Table 122 more students than expected in the named group indicated that more orientation and more counseling would help foreign students, while fewer students than expected in this group mentioned higher academic standards and entrance requirements. In the not named group fewer students than expected mentioned more orientation and more counseling; but more students than expected in the not named group mentioned higher standards. Other responses to this item were too dispersed to categorize and therefore, the total number of responses is well below the total number of students in each group.

The chi-square value of 0.743 with two degrees of freedom was obviously too small to reach the .05 level of confidence

and it was concluded that the two groups were not significantly different in their suggestions for solving the foreign students' difficulties.

Summary of American students' opinions of foreign students' housing and personal difficulties. A review of Tables 120, 121, and 122 showed that there were no significant differences between the two groups in their opinions about foreign students' housing, and difficulties, or in their solutions for solving the difficulties. The responses did, however, indicate certain similar attitudes and opinions between the students in both populations. Students in both groups tended to feel that the over-all arrangements for the foreign students at Indiana University were good. They also indicated that language and loneliness were the two major problems of the foreign students and that more orientation was the best solution for these problems.

## CHAPTER VI

## Summary

The number of foreign students enrolling in our colleges and universities has increased steadily in the years since World War II; and yet little research has been directed toward determining the influence that these students are having upon the American campuses. More specifically, little is known about the influence of these foreign students upon the American students. Research on the effect of foreign students upon American students has been almost wholly neglected; and therefore, the personality and behavioral changes in American students that might occur as a result of interaction with foreign students have never been identified. Furthermore, few, if any, investigations have focused on the characteristics of American students who do make friends with foreign students as compared to those who have equal opportunity to make friends with foreign students but fail to do so.

Because of this lack of research on American students there was a need for the investigation of such variables as the personality traits, background characteristics, prior experiences, and the factors inherent in campus living arrangements which might contribute to the evaluation of cross-cultural education. It was believed that knowledge of how and under what circumstances American students become friends with foreign students, and the common attitudes or interests that cause these acquaintanceships to develop into friendships would enable

educational administrators to plan better programs and increase the extent and effectiveness of cross-cultural interaction. This study has not attempted to measure changes that have or might occur in American students.

Therefore, the main objectives of this study were to:

1. Identify and learn the personal and background characteristics of those American students who were named as friends by foreign students.
2. Determine the personality characteristics and needs of the named friends as reflected on the Edwards Personal Preference Schedule and the Allport-Vernon-Lindzey Study of Values.
3. Ascertain the origin and development of the relationships between foreign and American students.
4. Determine the American students' perceptions of foreign students.
5. Learn what effects the American students felt their associations with foreign students had upon them as individuals.
6. Learn what the American students felt about other Americans' attitudes toward their friendships with foreign students.
7. Determine the American students attitudes toward financial aid for foreign students.
8. Determine the American students' opinions about foreign students problems and difficulties.
9. Determine some measurable differences that existed between a group of American students who were named as friends of foreign students and a group of American students who were not named as friends by foreign students.

For this latter objective it was possible to obtain a group of 148 named students and a group of 330 not named students who had associated with foreign students for a minimum period of one semester. Both of these groups of students



lived in the co-educational environment of the Graduate Residence Center at Indiana University. Living in this environment provided considerable opportunity for over 1100 foreign and American students to associate with one another. The foreign student population of the Center was comprised of 277 foreign students from 57 countries of the world--although about 50 per cent of these were from Asia. Cross-cultural opportunities for friendship were enhanced because common dining facilities, a center library, meeting rooms, and a well-planned program of social activities were available in the Center. Subsequently, the students both the named and not named groups had practically equal opportunity for making foreign student friends.

#### Summary of Procedures

The evaluation of the impact of foreign students upon American students was based upon the statistical analyses of 13 items of personal data, the scores from two personality inventories, and the responses from personal interview questions. The personal data items included in the analyses were: sex, age, marital status, campus housing unit, class standing, field of study, home state, size of home town, participation in activities, military service experience, birthplaces of parents, educational levels of parents, and occupations of parents.

The two personality inventories administered to the students in the named and not named groups were the Edwards

**Personal Preference Schedule and the Allport-Vernon-Lindzey Study of Values.**

Each personal interview contained 25 questions which were concerned with six areas of the students' friendships and associations with foreign students. These areas were: (a) the origin and development of the cross-cultural friendships, (b) the American students' perceptions of foreign students, (c) the influence of the foreign students on the American students, (d) the American students' perceptions of other Americans' attitudes, (e) attitudes toward financial aid for foreign students, and (f) opinions about foreign students' housing and personal difficulties.

Obtaining the named population. The population of named American student friends of foreign students was obtained through the use of a questionnaire which was distributed to the 756 foreign students enrolled at the Bloomington campus of Indiana University at the end of the Fall semester of 1963. Of these 756 foreign students, 530, or 70 per cent, returned completed questionnaires which contained the names of 572 American friends. Consequently, 554 of these 572 American students were interviewed concerning the friendships and associations with foreign students. Each personal interview was comprised of a series of 25 objective and open-ended questions. The responses to these questions were recorded on a semi-structured interview guide. Also, as a part of the interview contact, the students were asked to complete the

Edwards Personal Preference Schedule and the Allport-Vernon-Lindzey Study of Values at their own convenience and return the test booklets by free campus mail to the Dean of Students' Office. Of the 554 named students, 304, or 54 per cent, completed the EPPS and 310, or 55 per cent, completed the Study of Values. The 13 items of personal data for each of these students were obtained from the files in the Dean of Students' Office.

Obtaining the not named population. In order to achieve the objective of comparing a group of named students with a group of not named students it was necessary to obtain a comparative population. Therefore, the official room roster of the GRC was checked to determine which students had resided there during the fall and spring semesters of 1963-64 and who had not been named as friends by foreign students. After eliminating all foreign students and American students who did not meet the criteria for selection, there remained a population of 475 American students who had not been named as friends by foreign students. Of these 475 American students, 330, or 69 per cent, were interviewed for the study. These not named students were informed that they had been named as friends by foreign students and they were interviewed in exactly the same manner as the named population. It is possible that some of these students might have been named as friends by some of the foreign students who did not return the questionnaires.

Students in this comparative population were also asked to complete the two personality inventories of these 330 not named students, 169, or 51 per cent completed the EPPS and 161, or 48 per cent, completed the Study of Values. As in the case of the named population, the 13 items of personal data for each of these students were obtained from the records on file at the university.

Analysis of data for the total population of 554 students. The information from the three main sources of data was analyzed to determine the impact of foreign students upon the total population of the 554 named American students. This was done by determining:

- a. the percentage of students falling within specified categories on each of the 13 personal data items.
- b. the mean scores of the male and female students on each variable of the EPPS and the Study of Values.
- c. the percentage of students falling within specified categories on each of the 25 personal interview questions.

Statistical treatment of the data, therefore, involved the use of percentages to describe the personal data items and the personal interview responses of the 554 named friends. On the EPPS the mean scores of the named friends were converted to percentiles on each variable for comparison with the corresponding mean scores in the normative samples. The t-ratio was also used to test for the significant differences between the means on each variable for the male and female named groups.

For the Study of Values the t-ratio was used to test for significant differences between the means on each variable for

the male and female named groups, and also to test for the differences between each male and each female mean score of the named groups and the corresponding mean scores of the male and female groups in the normative samples.

Analysis of data for the comparison of the named and not named groups. The information from the three main sources of data was also used to determine what differences existed between 148 named American students and the 330 not named American students. These 148 named American students were selected from the total population of 554 American students because they had lived in the GRC during the fall and spring semesters of 1963-64 and because they had been named as friends by foreign students who also lived in the GRC.

These two groups (named and not named) were compared by determining:

- a. the nature and extent of the differences between the named and not named students on personal and background characteristics.
- b. the nature and extent of the differences between the two groups of students on each variable of the EPPS and the Study of Values, and
- c. the nature and extent of the differences between the responses of the two groups on each question in the personal interviews.

For the comparison of the named and not named groups the statistical treatment of the data involved the use of the chi-square test to determine the significance of the differences between the two groups on each item of personal data and on each question of the personal interviews. The analysis of variance

technique was used to determine the significance of the difference between the two groups of students on each variable of the EPPS and the Study of Values. Differences were considered to be significant when they reached the .05 level of confidence and to be very significant when they reached the .01 and the .001 levels of confidence.

#### Part One: Summary of the Total Named Population

Summary of Personal Data Items. The average of the 554 American students named as friends by foreign students was 25.2 years; and of these 554, 370, or 67 per cent, were males and 180, or 33 per cent, were females. In terms of marital status 381, or 68 per cent were single and 173, or 32 per cent were married or had been married at one time prior to the personal interviews.

These American friends of foreign students lived in seven different types of housing arrangements at the Bloomington campus, although the largest number, 186, or 33 per cent, lived in the Graduate Residence Center. Various accommodations out-in-town such as apartments and rooming houses accounted for 147, or 26 per cent, of the students while 112, or 20 per cent, of the students lived in undergraduate residence halls and 73, or 13 per cent, lived in the university's married housing units.

Graduate students comprised the largest single group of friends in terms of class standing with 356, or 64 per cent, in this category. Only 36, or six per cent, of the students were freshmen and 62, or 11 per cent, were seniors.



Languages and literatures were the major academic fields for 106, or 19 per cent, of the friends and 94, or 17 per cent, were majoring in fields related to government and business. There were 83, or 15 per cent of the students in the biological and physical sciences while 79, or 14 per cent, were in education. Biological and physical science students spend more time in labs and consequently are probably not in the lounges of the dormitories as much as the other students.

Upon investigating the previous extracurricular experiences of the named students it was found that 467, or 84 per cent, of the 554 students had participated in high school or college activities. Also, 81, or 15 per cent, of the students, had served in the military services but 462, or 83 per cent, had not been in the armed forces.

The largest number, 182, or 33 per cent, of the students came from home towns of over 100,000 populations, while only 91, or 16 per cent, came from home towns with populations of less than 2500. In terms of home states and regions of the country it was found that the largest number of students, 281, or 50 per cent, had come from the state of Indiana and a total of 369, or 67 per cent, of the total population came from the eight states in the middle region of the country. The smallest percentages of students came from the Northwest and far west regions of the country in that each of these regions contained about two per cent of the total population.

It was also found that the parents of these named friends averaged 13.1 years of education and that 435, or 79 per cent, of the fathers and 452, or 82 per cent, of the mothers were born in the United States. Also, 233, or 21 per cent, of these parents were employed in professional and managerial positions while 162, or 15 per cent, were employed in semi-skilled or unskilled occupations.

Summary of Personality Inventories. The two personality inventories administered to the students in the named and not named populations were the Edwards Personal Preference Schedule and the Allport-Vernon-Lindzey Study of Values. The EPPS contains 15 personality variables or needs. Scores from this instrument may be interpreted as indicating the relative strength of personal preference for a variety of activities and interpersonal relationships. The Study of Values contains six scales of interests or motives in personality. It should be noted that the students taking the inventories are all graduate students and are being compared by using undergraduate norms.

The named males and females mean scores on the EPPS were converted to percentiles and interpreted comparatively with the normative sex groups; also, the t-ratio was used to determine significant differences between the means of the named males and females on each of the 15 variables.

1. When the mean scores for the named males were converted to percentiles it was found that only two of the 15 scores exceeded the 60th percentile. The mean score of 16.931 on the Achievement variable fell at the 66th percentile and

the mean score of 14.167 on the Endurance variable fell at the 64th percentile. At the lowest end of the percentile range it was found that the two mean scores of 16.680 for Dominance and 16.670 for Heterosexuality both fell at the 45th percentile.

When the t-ratio was used to test for significant differences between the means of the male and female scores it was revealed that the males scored significantly higher than the females on Achievement, Dominance, Endurance, and Aggression variables.

2. Three mean scores of the named females exceeded the 60th percentile on the EPPS. On the Autonomy variable the mean score of 14.792 fell at the 77th percentile and the mean score of 14.683 on the Achievement variable fell at the 72nd percentile. The third mean score of 18.99 on Intraception fell at the 66th percentile. At the lowest end of the percentile range the mean score of 13.446 on the Abasement variable fell at the 37th percentile.

Results of the t-ratios between the named male and female mean scores showed that the females scored significantly higher than the males on the Affiliation, Intraception, Succorance, Abasement, Nurturance, and Change variables.

3. The results showed that the main population were essentially normal based upon the EPPS. The consistency scores of the total population indicated that the results were consistent and therefore reasonably reliable. This is in marked contrast to some assumptions that the friends of foreign students deviate from the normal stream of the population.

The results of this study showed that on no one particular scale was there a marked deviation from normal. In other words, there was no significant difference between the main population and the normative groups on any of the scales. Minor variations were those which would be expected.

Note that the same thing was essentially confirmed in the comparison between the named and not named population in GRC. In other words, these two populations also were essentially normal groups and similar rather than disparate.

4. On the Study of Values inventory the t-ratios showed that the named males scored significantly higher than the norm group males on one of the scales, and the norm group was significantly higher on two of the scales. The named males obtained a significantly higher score on the Aesthetic scale than the norm group males; but the norm group males had significantly higher means on the Economic and Political scales.

When the t-ratio was used to compare the means of the named males and the named females it was found that the named males scored significantly higher on the Theoretical value.

5. The mean scores of the named females were significantly higher than the mean scores of the norm group females on the Theoretical and Aesthetic values. The norm group females, however, were shown to have significantly higher means than the named females on the Economic and Religious values. When the t-ratio was used to test the difference between the means of the named females and the named males it

was found that the named females scored significantly higher on the Aesthetic and Social values.

### Summary of Personal Interviews Responses

Summary of cross-cultural patterns of friendship. In an attempt to ascertain the origin and development of cross-cultural friendships the friends of foreign students were asked nine questions. These questions were:

1. How did you first meet this foreign student friend?
2. Where do you usually get together?
3. What interests do you have in common?
4. Have you made friends with other foreign students?
5. Are they from other countries of the world?
6. Did you know other foreign people before you came to Indiana University?
7. Where did you know them?
8. Have you conversed with foreign students in any language other than English?
9. What languages have you used in conversing with foreign students?

It was found that the largest number of American students, 238, or 35 per cent, had met their foreign student friends in social settings, and the second largest number, 180, or 27 per cent, had met them through academic interests. Organized campus activities accounted for only 13, or two per cent of the initial contacts; and the smallest number of students, nine, or one per cent met at church related activities.

Almost one-half of the American students' responses to the question on where they usually get together with foreign students showed that most of the interaction occurred in the residence halls or housing units, and only 23 per cent of the responses referred to social and spontaneous activities.

In terms of the interests shared in common with foreign students it was found that the most numerous responses occurred in the academic area. The named students also shared a strong common interest in the home countries of their foreign student friends as well as having various social and cultural interests in common.

Almost 90 per cent of the American students had made friends with more than one foreign student and most of these other friends came from several different regions of the world.

It was also found that 453, or 82 per cent, of the named students had known foreign people before they came to Indiana University. Most of these 453 students had known foreign people at other schools and in their home communities and through travel, while overseas; but only a small percentage had known them through their families.

When asked about their conversations with foreign students in a language other than English, 282, or 51 per cent, of the named friends indicated that they had conversed in a foreign language; and of these 282 students 143, or 50 per cent, said that they had conversed with their foreign student friend in his own language.

Summary of American students' perceptions of foreign students. In order to determine the American students' perceptions of foreign students three major questions were asked. These questions were:

1. How do foreign students differ most from American students?



2. Do you think foreign students really get to know Americans?
3. What do foreign students think of Americans?

Since the first question in this series, "How do you think foreign students differ from American students?", was open-ended the responses were combined into four categories which reflected the American students' perceptions of how foreign students differed from American students. These four categories concerned differences in social, cultural, intellectual, and maturity attributes of the foreign students.

It was found that the majority, or 63 per cent, of the American students' responses characterized the foreign students as being different socially from American students but not necessarily having more or less in degrees of social characteristics.

In terms of cultural attributes, 61 per cent, of the American students' responses indicated that foreign students were more cultural than American students; and furthermore, 83 per cent, of the responses showed that the American students thought foreign students were more intellectual than American students.

The largest number of responses in reference to age and maturity attributes of foreign students showed that 90 per cent of the Americans thought foreign students were older and more mature than American students.

On the question, "Do you think foreign students really get to know Americans?", 23 per cent of the named students replied "yes" and 22 per cent said "no". The greatest number

of students, or 40 per cent, indicated that some foreign students do get to know Americans and some do not get to know us.

When the American students were asked to express their opinions on what foreign students think of Americans, the majority of students, or 41 per cent, indicated that foreign students like Americans. Furthermore, only six per cent said that foreign students dislike Americans, and 24 per cent of the named students felt that some of the foreign students like Americans and some dislike Americans.

Summary of foreign students' influence on American students. The extent and type of foreign student influence on American students was determined by the responses to three questions. These questions were:

1. Have you developed any new interests because of having known foreign students?
2. Has knowing foreign students changed your attitude on any question at home or abroad?
3. Have you changed any of your plans for the future because of having known foreign students?

It was found that 30 per cent of the American students' responses indicated a general broadening of their interests because of foreign students' influence. Furthermore, new interests in culture, government, and foreign affairs were reflected in 43 per cent of the total number of responses.

The influence of foreign students was also evident in the answers to the question, "Has knowing foreign students changed your attitude on any question at home or abroad?" On this question a total of 47 per cent of the responses showed attitude changes by the American students on foreign

affairs, foreigners, and on United States foreign and domestic policies. Other attitude changes were reflected in 31 per cent of the responses on foreign cultures, foreign countries, and United States.

Of the 554 named students, 405 mentioned that they had changed their plans for the future because of having known foreign students. Travel abroad was given as a change in future plans by 169, or 42 per cent, of the students, and 58, or 14 per cent, indicated a new desire to study abroad. Furthermore, 47, or 12 per cent, of the students indicated a change in vocations because of the foreign students' influence.

Summary of American students' perceptions of other Americans' attitudes. In response to the open-ended question, "How do other Americans react to American students associating with foreign students?", most of the named students referred to (a) friendship in general with foreign students, and (b) a dating relationship with foreign students.

The largest number of students, 247, or 45 per cent, felt that other Americans had favorable attitudes toward their friendships with foreign students; and only 33, or six per cent of the named students perceived other Americans' attitudes as being unfavorable to cross-cultural friendships.

In terms of the dating relationship, however, only 56, or ten per cent of the named friends perceived other Americans as being favorable. Also, 111, or 20 per cent, of the named students felt that other Americans had unfavorable attitudes toward cross-cultural dating; and 58 per cent of the students declined to express an opinion on this aspect of the question.

Summary of American students' attitudes toward financial aid for foreign students. The named students were asked two questions concerning their opinions on providing financial aid to foreign students--through the federal government and through a state university.

It was found that 417, or 75 per cent, of the 554 students favored federal government aid to foreign students; while 87, or 16 per cent, did not favor government aid.

Furthermore, 402, or 73 per cent, of the 554 named students favored financial aid to foreign students through a state-supported university, and only 100, or 18 per cent, did not favor state university financial support of foreign students.

Summary of American students' opinions about foreign students' housing and personal difficulties. Each interview with the named friends was concluded with a series of three questions pertaining to the foreign students' housing arrangements, their problems and difficulties, and to ways of solving these difficulties.

When the American students were asked about the over-all housing arrangements for foreign students at Indiana University almost one-half, or 49 per cent, expressed the opinion that the facilities were good, and 30, or six per cent, indicated that the arrangements were bad. About one-third, or 32 per cent, of the students failed to express any opinion about the housing arrangements.

In relation to the difficulties encountered by foreign students, it was found that 39 per cent of the American students

considered loneliness to be a major problem and 33 per cent indicated that language was a prominent foreign student difficulty. Furthermore, American customs were given by 14 per cent of the named friends as a common foreign student problem.

According to 38 per cent of the named friends more orientation would alleviate many of the foreign student difficulties. Also, 14 per cent of the students felt that higher academic standards and higher entrance requirements would solve many problems before they arise; and 13 per cent of the named friends favored more counseling as a means of solving the foreign students' difficulties.

#### Part two: Summary of the Comparative Populations

One of the objectives of this study was to compare a group of 148 American graduate students who lived in the Graduate Residence Center at Indiana University and who were named as friends by foreign students with a similar group of 330 American graduate students who also lived in the Graduate Residence Center but who had not been named as friends by foreign students.

These 148 American students were named as friends by the 277 foreign students who lived in the GRC during the fall semester of 1963-64. The 330 not named American students were residents of the GRC during the fall and spring semesters of 1963-64 but they had not been named as friends by any of the 277 foreign students in the GRC.

The comparison of the two groups was based upon the statistical analyses of 13 items of personal data, the scores



from two personality inventories, and the responses from 25 personal interview questions. The personal data items included in the analyses were: age, sex, marital status, field of study, home state, size of home town, participation in high school and college activities, military service experience, birthplaces of fathers and mothers, educational levels of fathers and mothers, and occupations of parents.

The two personality inventories administered to the students in the named and not named groups were the Edwards Personal Preference Schedule and the Allport-Vernon-Lindzey Study of Values.

Each personal interview contained 25 questions which were concerned with six areas of the students' friendships and associations with foreign students. These areas were: (a) the origin and development of the cross-cultural friendships, (b) the American students' perceptions of foreign students, (c) the influence of the foreign students on the American students, (d) the American students' perceptions of other Americans' attitudes, (e) attitudes toward financial aid for foreign students, and (f) opinions about foreign students' housing and personal difficulties.

Since the 330 students in the not named population had lived in the GRC for two semesters it was assumed that they had had an equal opportunity to associate and make friends with foreign students. The sole criterion for their placement in the not named group was the fact that they had not been



named as friends by foreign students on the foreign student questionnaire. During the initial contact with the interviewers, however, these not named students were informed that they had been named as friends by foreign students and they were interviewed in exactly the same manner as the students in the named population.

#### Summary of Personal Data

The results of the statistical analyses for the 13 items of personal data revealed that the groups were shown to be significantly different on three of the items. The three items which reflected differences between the two groups were: (a) marital status, (b) fields of study, and (c) home states.

It was found that there were more married students and fewer single students than expected in the named population; and more single students and fewer married students than expected in the not named population.

A comparison of the major fields of study revealed that significant differences existed between the students in the named and not named populations. The chi-square analyses showed that American student friends of foreign students tended to major more often than expected in the academic areas of: (a) history, and its related fields, and (b) languages and literature. Furthermore, it was revealed that foreign students tended to make fewer friends with American students who were majoring in the biological sciences and physical sciences, and in education.

The third personal characteristic that reflected differences between the two groups of students was the national region encompassing their home states. American student friends of foreign students tended to come from the Northeast and Southwest regions of the country more often than expected; and American students who were not named as friends tended to live in the middle states, western states, and the Southwest regions of the country.

#### Summary of Personality Inventories

On the personality inventories a one-way analysis of variance technique was used to compare the mean scores of the males and females in the named and not named groups. Statistically significant differences were found on one variable of the EPPS for the male students and on two variables of the EPPS for the female students.

The mean scores of the males in the named and not named populations resulted in significant differences on the Nurturance variable of the EPPS. According to the normative group scores for college men on the Nurturance variable, the average score of 16 obtained by the named males would be at the 70th percentile and the average score of 14 for the not named males would be at the 55th percentile (19:12). Thus, the named males might be characterized as being more of the type of people who would help friends who would help friends when they are in trouble and who would assist others less fortunate than themselves (19:11).

The average score obtained by the females in the named population resulted in significant differences on the Autonomy and Heterosexuality variables of the EPPS. On the Autonomy variable the named females obtained a mean score of 15 and the not named females obtained a mean score of 11.9. On the college norms for women a score of 15 would be at the 61st percentile and a score of 11.9 would be at about the 34th percentile (19:12). Therefore, the named females tend to be characterized as persons who like to be able to come and go as they please, to be independent, and who like to do things that are unconventional (19:11).

On the Heterosexuality variable the named females averaged 13.9 points and the not named females averaged 16.5 points. The percentile equivalent of 13.9 would be at about 52 on the college norms for women and a score of 16.5 would be equal to about the 66th percentile (19:12). Thus, the not named females could be described as persons who like to go with members of the opposite sex and who like to be regarded as physically attractive by members of the opposite sex (19:11).

Scores obtained by the males in the named and not named populations resulted in statistically significant differences on two scales of the Study of Values. On the Economic scale the males in the named group obtained an average score of 32 points and the not named males averaged 37 points. Both of these scores were below the average Economic score of 42.05 for college male students (3:11). Because the named males scored ten points below the average score for college males, however,

it would be possible to describe these men as having less concern for, and interest in, the practical affairs of the business world than the average college male. Because the not named males scored five points below the average score for college males it would be possible to describe these men as having less concern for and interest in the practical affairs of the business world than the average college male but more concern for and interest in the business world than the named males.

The average score of 38 points obtained by the named males and the average score of 41 points obtained by the not named males on the Political scale of the Study of Values were very close to the average score of 42 obtained by the college male norm group (3:11). The slightly higher average score obtained by the not named males would indicate that these men place a higher value on the competition and the satisfaction that comes from positions of leadership (3:5).

The Study of Values scores for the females in both groups resulted in statistically significant differences on two of the values. On the Theoretical value the named females obtained a mean score of 41 points and the not named females obtained a mean score of 38 points. Since the named females' average score of 41 was 4.5 points above the average score of 36.5 obtained by the college female norm group (3:11) it would be possible to describe these females as being persons who place a high value on cognition and who reflect an empirical and rational point of view (3:4).

On the Political value the named females averaged 40 points and the not named females averaged 36 points. Both of these scores were found to be very close to the average score of 38 obtained by the females in the college norm group (3:11). The slightly higher score obtained by the named females would indicate that these women could be described as being persons who place a high value on personal power and influence in life (3:5).

#### Summary of Personal Interview Responses

Summary of cross-cultural patterns of friendship. In order to determine the origin and development of cross-cultural friendships the American students in the named and not named populations were asked nine questions concerning their friendships with foreign students. Consequently, through chi-square analyses it was found that these two groups of students differed significantly on six of these nine questions. The six questions on which the two groups differed were:

1. How did you first meet this foreign student friend?
2. Where do you usually get together?
3. What interests do you have in common?
4. Have you made friends with other foreign students?
5. Are your friends from other countries ? (other than the friend first mentioned)
6. Have you conversed with foreign students in any language other than English?



The three questions on which the groups did not differ were:

1. Did you know any foreign people before you came to Indiana University?
2. Where did you know other foreign people?
3. What other languages have you used in conversing with foreign students?

On the first question which was concerned with how the American students had first met their foreign student friends, the greatest statistical differences were found to be in the categories of academic areas, residence halls, and socially. More named students than expected had met their foreign student friends in the residence halls or socially, while more of the not named students than expected had met their friends in the academic areas. The responses to this question seemed to indicate that the students in the named group had made the initial effort to meet foreign students in situations where the association would be voluntary and by choice, whereas the students in the not named group met foreign students more often than expected in situations which were structured primarily for academic purposes, and the choice of associates was predetermined.

It was also revealed that the named students associated with their foreign student friends more often than expected in the residence halls, socially, or in activities, as compared to the not named students who got together with their foreign student friends more often than expected in academic situations.

When the students were asked what interests they had in common with their foreign student friends the named students indicated that they shared cultural and religious interests



more often than expected; the not named students indicated that they shared academic interests and interest in people with the foreign students.

The differences between the two groups in terms of having made other foreign student friends showed that the named students made other friends more often than expected while the not named students had made friends less often than expected in the chi-square ratio. Also, it was revealed that the other friends of the named students came from several regions of the world but the not named students tended to make friends from the same region of the world as their first friend (referred to in question one and two), or from just one other region of the world.

It was also shown through the chi-square ratio that more of the named students than expected had conversed with foreign students in a language other than English; but fewer of the not named students than expected had conversed in other languages.

Summary of American students' perceptions of foreign students. An analysis of the questions concerning American students' perceptions of foreign students showed significant differences between the named and not named populations on two of these questions. The questions which reflected significant differences were:

1. How would you say they (foreign students) differ from most American students?
2. Do you think foreign students really get to know us? (Americans)

The question which did not show significant differences was: What do foreign students think of us? (Americans).

The named students saw the foreign students as being more cultured and more sociable, but less intellectual than American students; and they were inclined to feel that foreign students really do get to know Americans.

Students in the not named group indicated that foreign students were less cultured and less sociable, but more intellectual than American students. Also, these students felt that foreign students did not really get to know Americans.

Summary of the extent and influence of foreign students on American students. There were no statistically significant differences on the following three questions which pertained to the influence of the foreign students on the American students:

1. Have you developed any new interests? (As a result of knowing foreign students)
2. Has knowing foreign students changed your attitudes on any question at home or abroad?
3. Have you changed any of your plans for the future? (Because of knowing foreign students)

The fact that the responses were not significantly different on any of these questions seemed to indicate that the influence of the foreign students was no greater on their close friends than it was on the students whom they associated with in classes and in the residence halls.

Summary of American students' perceptions of other Americans' attitudes. There was just one significant difference between the students' perceptions of other Americans' reactions

to friendships with foreign students. This difference arose between how other Americans see friendship in general with foreign students and how they see friendship in a dating relationship. There was no significant difference between the perceptions of named and not named students in terms of how they thought other Americans viewed casual friendships; but there was a significant difference in terms of how they thought other Americans viewed cross-cultural dating relationships. Students in the named group perceived other Americans' reactions as being favorable, or at least indifferent, to cross-cultural dating, but the not named students perceived other Americans as viewing this type of relationship unfavorably.

Summary of attitudes toward financial aid for foreign students. In the interview two questions were asked concerning the American students' attitudes toward helping foreign students financially. The first question dealt with students' attitudes toward extending federal government aid, and the second question focused on a state university's financial support of foreign students. There were no statistically significant differences between the students in the named and not named groups on either of these questions, but the results did show a definite trend in favoring financial aid. The extent of the frequencies favoring financial aid seemed to indicate a rather strong positive attitude on the part of the American students to help foreign students financially both through the federal government and through the university.

Summary of American students' attitudes toward foreign students' housing and personal difficulties. The last three questions of the interview pertained to: (a) the students' opinions of the over-all housing arrangements for foreign students, (b) foreign students' difficulties, and (c) the possible solutions for these problems. The chi-square ratio showed that there were no significant differences between the two groups on any of these questions. The responses did indicate certain rather similar feelings and opinions among the students on each of the items. Students in both groups tended to feel that over-all arrangements for foreign students at Indiana University were good. They also indicated that language and loneliness were the two major problems of the foreign students and that more orientation was the best solution for these problems.

Conclusions Based Upon a Comparison  
of the Named and Not Named Populations

This study was a comparison of a group of American graduate students who lived in the Graduate Residence Center and who had been named as friends by foreign students with a similar group of American graduate students who also lived in the Graduate Residence Center but who had not been named as friends by foreign students. An analysis of the problem resulted in the formulation of the following two major questions:

1. What were the descriptive personality characteristics of those students who were named as friends by foreign students and what were the descriptive personality

characteristics of those students who were not named as friends by foreign students?

2. How did the descriptive personality characteristics of the named group of American students compare with the descriptive personality characteristics of the not named group of American students?

Examination of these two major questions led to the compilation of 34 detailed objectives, and these detailed objectives were fulfilled through the analyses of three main types of information. The information included: (a) 13 items of personal data, (b) two personality inventories, and (c) 25 personal interview questions.

The conclusions of this investigation, based on the results of the statistical data for each of the 34 detailed objectives, are as follows:

1. There was no significant difference between the ages of the students in the named group and the ages of the students in the not named group. The age range for students in each group was divided into three levels and a chi-square comparison was computed which showed that the groups were not significantly different. Even though there was no significant difference, however, it might be noted that the greatest percentage of students in each group--66 per cent of the named and 71 per cent of the not named--were in the 20 to 25 year age bracket.

2. There was no significant difference between the number of males and females in the named group and the number of males and females in the not named group. The males in each group comprised a larger percentage of the total number



of students but not large enough to reflect a significant difference. In the named group there were 82, or 55 per cent males; and in the not named group 200, or 69 per cent, were males.

3. There was a significant difference between the marital status of the students in the named group and the marital status of the students in the not named group. There were more married students than expected by the chi-square ratio in the named group and fewer married students than expected in the not named group. Although 39, or 20 per cent, of the foreign students were married, only 17, or 11 per cent of the students named as friends were married; and 19, or 5 per cent, of the not named students were married. Married foreign students do come to Indiana University without their spouses and live in GRC, but few American students do. Single American students may be looking for mates, while the married American students living in GRC are not and would spend more time in the dormitory being friendly with the foreign students.

4. There was a significant difference between the geographical distribution of the students in the named group and the geographical distribution of the students in the not named group in terms of their home states. It was shown by the chi-square ratios that American student friends of foreign students tended to come from the Northeast and Southwest regions of the country, and the students who had not been named as friends tended to come more often from the middle states, western states, and the Southeast regions of the country.



Numerous factors--such as the cosmopolitan cities of the eastern states, the political conservatism of the mid-west, and the Protestant morality ethic in the southern states--might account for this difference but there is insufficient evidence to warrant broad generalizations in the present study.

5. There was no significant difference between the size of the home towns of the students in the named group and the size of the home towns of the students in the not named group. Evidently, on the basis of the six population groups used in categorizing the students' home towns, the size of the home town of a student did not affect his chances of being named or not being named as a friend of a foreign student.

6. There was no significant difference between the national birthplace (U.S. or foreign) of the fathers and mothers of the students in the named group and the national birthplace of the fathers and mothers of the students in the not named group. Since the students in the named group did not have a larger number, proportionately, of foreign born parents than the students in the not named group it was concluded that birthplace of parents was not a significant factor in being selected or not being selected as a friend by a foreign student.

7. There was no significant difference between the educational levels of the fathers and mothers of the students in the named group and the educational levels of the fathers and mothers of the students in the not named group. Thus, the amount of education of the parents did not seem to affect

the chances of a student being named as a friend of a foreign student.

8. There was no significant difference between the occupational levels of the parents of the students in the named group and the occupational levels of the parents of the students in the not named group. From the results of the chi-square analysis on the level of occupations it was concluded that parental occupations were not significant factors in determining which students would be more likely to be chosen as a friend by a foreign student.

9. There was no significant difference between the number of students in the named group and the number of students in the not named group in terms of their participation in high school and college activities. According to the statistical comparison, just as many named students as not named students had participated in extra-curricular activities. Thus, the data from this investigation indicates that American students who are friends of foreign students were just as active as other American students in their high school and college careers.

10. There was no significant difference between the military service experience of the students in the named group and the military service experience of the students in the not named group. Thus, it might be concluded that military service experience, in and of itself, does not indicate that a person would be more or less likely to be named as a friend of a foreign student.

11. There was a significant difference between the fields of study of the students in the named group and the fields of study of the students in the not named group. It was concluded from the results of the chi-square analyses in this study that there are two definite trends in the major subject fields of the American student populations. The first trend indicated that American student friends of foreign students tended to major more often than would be expected in the areas of (a) languages and literatures, and (b) history and its related fields. The second trend indicated that American students who major in biological and physical science or in education do not tend to be chosen as friends by foreign students. It might be surmised from these two trends that academic interests may have some bearing upon the interest or inclination that American students may have for associating with foreign students. Students in the language and literature fields may have more genuine interest in communicating with people from other countries and in learning about their customs, folkways, and culture. Students in the sciences or in education, may on the other hand, lack the interest to learn about other countries and their peoples. Then, too, it may be that foreign students tend to seek out American students who are conversant in a foreign language and therefore the motivation for making or not making friends may lie with the foreign students rather than the American students. If this were the case it would not be the students in the sciences and education who determine the choice made by the foreign

students, but rather the needs and motivations of the foreign students.

12. There was a significant difference on the mean raw scores of the students in the named group and mean raw scores of the students in the not named group on the following variables of the Edwards Personal Preference Schedule:

(a) Nurturance--It was concluded that the males in the named group expressed a greater Nurturance need than the males in the not named group. Although the results of the analyses showed a significant difference between the groups, it was recognized that this one difference out of the possible 15 variables may have resulted by chance. However, since the mean raw score for the named males was equivalent to the 70th percentile on the college men's norms, the difference was accepted between the two groups.

(b) Autonomy--It was concluded that the females in the named group expressed a greater need for Autonomy than the females in the not named group. It was believed that these women in the named group expressed a greater desire to be independent than the women in the not named group.

(c) Heterosexuality--It was concluded that the not named females expressed a greater Heterosexuality need than the women in the named group.

13. There was a significant difference between the mean and raw scores of the students in the named group and the mean raw scores of the students in the not named group on the following variables of the Allport-Vernon-Lindzey Study of Values:

(a) Economic--It was concluded that since the males in the not named group scored higher than the males in the named group it might be possible to characterize the not named males as persons who place a higher value on the practical affairs of the business world than the named males.

(b) Political--It was concluded that since the males in the not named group scored slightly higher than the males in the named group on the Political value it might be possible to characterize the not named males as persons who value more the competition and satisfactions that come from positions of leadership.

(c) Theoretical--It was concluded that since the named females scored higher than the not named females on the Theoretical value it might be possible to describe these named females as women who place a high value on cognition and who reflect an empirical and rational point of view.

(d) Political--It was concluded that since the named females scored higher than the not named females on the Political value it might be possible to describe these women as persons who place a high value on personal power and influence in life.

14. There was a significant difference between the responses of the students in the named group and the responses of the students in the not named group in terms of where they first met a particular foreign student friend. The initial contact for 84 per cent of the named students occurred in living areas and social situations whereas 73 per cent of the



first meetings for the not named group occurred in these two places. Thus, it was believed that named friends tended to meet their friends more often in the social situations where the overture or initial impetus would be voluntary and by choice.

15. There was a significant difference between the responses of the students in the named group and the responses of the students in the not named group in terms of where they usually get together with their foreign student friends. The named friends of foreign students associated more often in the social and activities situations; but the not named students associated with the foreign students more often in academic and residence hall situations.

16. There was a significant difference between the responses of the students in the named group and the responses of the students in the not named group in terms of the interests they have in common with foreign students. The students in the named group shared cultural interests in common with their foreign student friends whereas the students in the not named group indicated that they shared academic interests in common with foreign students.

17. There was a significant difference between the number of students in the named group and the number of students in the not named group who have made friends with other foreign students. More students in the named group had made friends with other foreign students, and fewer students in the not named group than expected had made friends with other



foreign students. These results seemed to indicate that the named friends had made a greater effort to associate with foreign students than the students in the not named group.

18. There was a significant difference between the responses of the students in the named group and the responses of the students in the not named group in terms of the national origin of their other foreign student friends. The students in the named group tended to have other foreign student friends who were from several regions of the world, whereas the not named students tended to have friends from just one other region or just the same region as the first friend that they mentioned. Thus, it seemed that the named students had a wider range of foreign student friends than the students in the not named group.

19. There was no significant difference between the responses of the students in the named group and the responses of the students in the not named group on the question of having known foreign people before coming to Indiana University.

20. There was a significant difference between the responses of the students in the named group and the responses of the students in the not named group on the question of having conversed with foreign students in a language other than English. More students in the named group had conversed with foreign students in other languages, and fewer not named students than expected had conversed with foreign students in other languages. Thus, the results of this particular analysis seemed to confirm the findings mentioned previously concerning

the fact that more named students than expected were majoring in the field of languages.

21. There was no significant difference between the responses of the students in the named group and the responses of the students in the not named group in terms of what other languages they have used in conversing with foreign students.

22. There was a significant difference between the students in the named group and the students in the not named group concerning how they think foreign students differ from American students. The students in the named group saw the foreign students as being more cultured and more sociable than American students, but less intellectual than Americans. The students in the not named group saw the foreign students as being less cultured and less sociable, but more intellectual than American students. These differences in perception seemed to indicate that the named students saw very desirable traits in foreign students which would encourage, or at least provide the basis for satisfying friendship. The not named students, on the other hand, saw the foreign students as being intellectual, which may reflect upon the previous findings that more of the students in this population met and associated with foreign students in academic situations.

23. There was no significant difference between the responses of the students in the named group and the responses of the students in the not named group concerning what they think foreign students think of Americans. Most students in both populations reported that foreign students were favorable

toward Americans and only a small number of students in each group indicated that they felt foreign students disliked Americans.

24. There was a significant difference between the responses of the students in the named group and the responses of the students in the not named group concerning their beliefs about the extent to which foreign students really get to know Americans. It was concluded that the students in the named group believed that foreign students do get to know Americans; and that students in the not named group tended to believe that foreign students do not get to know Americans.

25. There was no significant difference between the responses of the students in the named group and the responses of the students in the not named group in terms of the number of new interests which they have developed as a result of having known foreign students. It was concluded that the students in both groups had gained new interests as a result of their association with foreign students, but there was no significant difference in the number of new interests gained by the named friends and the students who were not named.

26. There was no significant difference between the students in the named group and the students in the not named group in terms of the number of attitudes which have been modified as a result of having known foreign students. It was concluded that students in both groups had modified their attitudes on various questions about the United States and world

affairs but there was no significant difference in the number or degree of attitude changes between the two groups.

27. There was no significant difference between the responses of the students in the named group and the responses of the students in the not named group in terms of the changes in future plans that they have made as a result of having known foreign students. It was concluded that students in both groups had considered changing their plans for the future but there was no significant difference between the number of students in the two groups who had indicated changing their plans.

28. There was no significant difference between the responses of the students in the named group and the responses of the students in the not named group in terms of how they think other Americans view friendships with foreign students. It was concluded that students in both groups felt that other Americans were favorable toward friendships with foreign students, or at the least, they were indifferent toward them.

29. There was a significant difference between the responses of the students in the named group and the students in the not named group in terms of how they think other Americans view a dating relationship with foreign students. It was concluded that the students in the named group tended to feel that other Americans were favorable, or at the least, indifferent to a dating relationship with foreign students but the students in the not named group felt that other Americans were unfavorable toward a foreign and American student dating relationship.

30. There was no significant difference between the attitudes of the students in the named group and the attitudes of the students in the not named group toward federal government financial aid for foreign students. It was concluded, however, that students in both groups were favorable toward financial aid for foreign students because of the large number of students who indicated that they approved of it.

31. There was no significant difference between the students in the named group and the students in the not named group toward Indiana University giving financial aid to foreign students. It was concluded, however, that students in both groups approved of Indiana University giving aid to foreign students.

32. There was no significant difference between the responses of the students in the named group and the responses of the students in the not named group in terms of what they think of the over-all arrangements for foreign students at Indiana University. It was concluded that the students in both groups felt that the arrangements in housing and programs for the foreign students were good.

33. There was no significant difference between the responses of the students in the named group and the responses of the students in the not named group in terms of what kinds of difficulties they think foreign students have. It was concluded that the students in both groups perceived the foreign students difficulties to be mainly language and loneliness.



34. There was no significant difference between the responses of the students in the named group and the responses of the students in the not named group in terms of what they think could be done to alleviate the difficulties encountered by foreign students. It was concluded that the students in both groups felt that more counseling, higher standards, and more orientation would alleviate some of the foreign students' difficulties.

#### General Conclusions

In addition to the specific conclusions drawn from the data obtained in the comparative study numerous general conclusions were drawn based upon the data obtained from the total population of 554 named students. Also, several general conclusions were drawn from the comparative populations which do not pertain to any of the specific objectives and which reflect inferences of a more comprehensive nature.

1. Friendship between foreign and American students is based upon similarities in interests and environmental proximity rather than upon national differences or the personal and background characteristics of the American students.

2. There are no gross personality differences between American student friends of foreign students and other American college students.

3. American student friends of foreign students are socially active and well-integrated in campus life.



4. The initial contacts between foreign and American students arise from informal and spontaneous meetings and academic interests rather than from formally organized campus activities.
5. Formal campus activities contribute very little to foreign and American student interaction.
6. Community organizations contribute very little to foreign and American student interaction.
7. Foreign and American student friendships are based upon a wide range of interests and are not necessarily initiated or continued because of the national differences involved.
8. American students tend to form friendships with students from a wide range of countries and regions of the world rather than with students from just one country or region of the world.
9. Foreign and American student friendships tend to be limited to the campus community and are not usually expanded to the American students' home community and family.
10. Prior experience with foreign students or people in other schools, home community and through travel may or may not be a factor in encouraging foreign and American student friendship.
11. Conversation in a foreign language is not a primary factor in foreign and American student friendship.
12. American student friends of foreign students see foreign students as being more interested in culture and more mature than American students.

13. Friendship with foreign students does not encourage American students to participate in foreign student activities.

14. Friendship with foreign students encourages American students to re-evaluate their attitudes toward national and domestic policies of the United States.

15. Friendship with foreign students encourages American students to take a broader interest in national and international affairs.

16. Friendship with foreign students encourages American students to alter their future plans.

17. American student friends of foreign students see other Americans as being favorable toward their friendships with foreign students.

18. American students are highly favorable toward financial aid for foreign students through the federal government and through Indiana University.

19. Most American student friends of foreign students are aware of and sensitive to the problems of foreign students.

20. The American student friends of foreign students cannot be differentiated from other American students on the basis of background characteristics and previous experiences.

21. The foreign students do not influence the attitudes and beliefs of their close American student friends any more noticeably than they do other American students with whom they associate.

22. The physical structure of the Graduate Residence Center--which includes common lounges, dining facilities, and

library--provides an environment which encourages and enhances cross-cultural interaction and association between the student residents.

### Recommendations

As a result of the findings of this study the following recommendations are offered:

1. The objectives of foreign student programs should be re-evaluated in the light of the findings of this study. It may be found that the objective of stimulating foreign and American student interaction is being defeated by virtue of the organizational structures and formal programs which were created to accomplish this very objective.

Friendship requires numerous short-term contracts, such as standing in line together at the dining hall, sitting in a lounge watching a news broadcast on TV, washing hands together in the lavatory, walking back and forth to class, etc. These spontaneous repetitive short-term contacts will contribute to personal interaction as opposed to the formal structured programs which might give more sheer information or orientation to American life.

These objectives need to be clarified and evaluated in determining the total foreign student program.

This study has been based upon the encouragement of friendships and personal interaction and does not necessarily refer to the achievement of other objectives of the foreign student program.

2. Because the physical structure of the Graduate Residence Center creates an environmental proximity which enhances cross-cultural interaction all graduate foreign students enrolled at Indiana University should be required to reside in this Center during their first semester on campus.

In discussing the fact that the residence setting seems to contribute so greatly to the interaction of American students and foreign students, it might be recommended that financial aid by a university to foreign students be made in the nature of a board and room grant to live in the residence halls. Those foreign students who do not wish to accept a grant under these conditions would not have to but those who did would at least be contributing toward the achievement of one of the objectives of the university financial aid program of furthering the interaction between American and foreign students. Those who received cash obviously might spend it for material things but those who receive it in the nature of board and room would be forced to use it to the advantage of the university and the foreign student.

3. Further research should be conducted on other college campuses with foreign student populations and with housing units such as the Graduate Residence Center to confirm or reject the conclusions of this study. Also, research should be conducted in a variety of educational institutions to determine the extent and effect of cross-cultural interaction when such facilities are lacking.

4. Further research is needed to determine what factors caused the named and not named groups of students to perceive foreign students differently. Investigation of the variables involved in perception may lead to an understanding of personality factors that distinguish these two groups of students.

5. Further research is needed to determine what factors are involved in the differences that were found between the named and not named groups of students in terms of their geographical origin. Perhaps further investigation of regional sub-cultural values as proposed by Gillin (24) would reflect more specific characteristics of persons from different regions of the country.

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## APPENDIX



## APPENDIX

## Appendix A

## Questionnaire

1. What is the name of your country?
2. Where do you live? (check one)
 

<input type="checkbox"/> Graduate Residence Center	<input type="checkbox"/> Room in a private home
<input type="checkbox"/> Married Housing	<input type="checkbox"/> Campus Club
<input type="checkbox"/> Fraternity or Sorority house	<input type="checkbox"/> Rooming house in town
<input type="checkbox"/> Apartment in town	<input type="checkbox"/> Undergraduate Residence Hall
3. What is your age? \_\_\_\_\_
4. What is your sex? Male \_\_\_\_\_ Female \_\_\_\_\_
5. Are you married? Yes \_\_\_\_\_ No \_\_\_\_\_
6. If you are married, is your husband or wife here with you?  
Yes \_\_\_\_\_ No \_\_\_\_\_
7. If you are married, are your children here with you?  
Yes \_\_\_\_\_ No \_\_\_\_\_  
a. If yes, how many children are here? \_\_\_\_\_
8. Toward which degree are you working? Not a degree candidate \_\_\_\_\_; Bachelor's \_\_\_\_\_; Master's \_\_\_\_\_ Doctor's \_\_\_\_\_.
9. What is your major field of study? \_\_\_\_\_
10. How many months have you been in the United States on this visit? \_\_\_\_\_ months.
11. Have you ever visited the United States before? Yes \_\_\_\_\_ No \_\_\_\_\_
12. How much longer do you expect to stay here? \_\_\_\_\_ months.
13. Which one of the following was your major reason for coming to the United States? (check one)
 

<input type="checkbox"/> 1. to study in a special field
<input type="checkbox"/> 2. to get a general education
<input type="checkbox"/> 3. to live in another country and get to know the people
<input type="checkbox"/> 4. other reason--such as special conference group, etc.

 Please list the reason if you check number 4; \_\_\_\_\_
14. What is your religious preference? (optional) \_\_\_\_\_
15. How many other countries have you visited for longer than one month? \_\_\_\_\_

16. Have you traveled in other countries as a tourist? Yes \_\_\_\_\_  
No \_\_\_\_\_ What countries? \_\_\_\_\_
17. During your stay here what percentage (approximately) of your free time each week is spent with American students? (in the dining hall, lounges social events, etc.)  
More than 50% \_\_\_\_\_  
40 to 50% \_\_\_\_\_  
30 to 40% \_\_\_\_\_  
20 to 30% \_\_\_\_\_  
10 to 20% \_\_\_\_\_  
Less than 10% \_\_\_\_\_
18. If you were going to a social event, would you prefer to go with someone from: (check one) a. the United States \_\_\_\_\_;  
b. your own country \_\_\_\_\_; c. a country other than the U.S. \_\_\_\_\_.
19. If you had to study with some, would you prefer to study with someone from: (check one) a. the United States \_\_\_\_\_;  
b. your own country \_\_\_\_\_; c. a country other than the U.S. \_\_\_\_\_.
20. How much (approximately) of your free time each week is spent with people of your own nationality? (meal times, lounges, dining halls, social events, etc.) (check one)  
More than 50 % \_\_\_\_\_  
40 to 50% \_\_\_\_\_  
30 to 40% \_\_\_\_\_  
20 to 30% \_\_\_\_\_  
10 to 20% \_\_\_\_\_  
Less than 10% \_\_\_\_\_
21. How much (approximately) of your free time each week do you spend alone? (check one)  
More than 50% \_\_\_\_\_  
40 to 50% \_\_\_\_\_  
30 to 40% \_\_\_\_\_  
20 to 30% \_\_\_\_\_  
10 to 20% \_\_\_\_\_  
Less than 10% \_\_\_\_\_
22. If you were faced with a serious personal problem and needed assistance, would you prefer to go to: (check one)  
a. someone from Dean Dowling's office \_\_\_\_\_  
b. a friend from your own country \_\_\_\_\_  
c. an American friend \_\_\_\_\_  
d. a friend from another country \_\_\_\_\_
23. Have you been invited to visit in the homes of any American students? Yes \_\_\_\_\_ No \_\_\_\_\_
24. Do you enjoy visiting in the homes of American students? Yes \_\_\_\_\_ No \_\_\_\_\_

25. How many times have you visited in the homes of American students?(check one) a. 1 to 5 times\_\_\_\_; b. 6 to 10 times\_\_\_\_; c. more than 10 times\_\_\_\_\_.
26. If you had the opportunity to invite someone to visit your home in your native country, would you prefer to invite someone from: (check one) a. the United States\_\_\_\_; b. your own country\_\_\_\_; c. a country other than the U.S.\_\_\_\_\_.
27. Of all the people you know here, about how many do you consider to be close friends? \_\_\_\_\_.
28. Of all the people you know here, about how many do you consider to be casual friends or acquaintances? \_\_\_\_\_.
29. How many of your close friends are American students? \_\_\_\_\_
30. Please list the names of some of your close friends who are American students. (Do not hesitate to ask then how to spell their names--they will be pleased.)
1. \_\_\_\_\_  

First name
Last name
  2. \_\_\_\_\_
  3. \_\_\_\_\_
  4. \_\_\_\_\_
  5. \_\_\_\_\_
31. Please check the following activities as to whether or not you think they are helpful in encouraging and maintaining interaction between foreign students and American students.
1. YM/YWCA Activities: Yes\_\_\_\_ No\_\_\_\_
  2. Cosmopolitan Club: Yes\_\_\_\_ No\_\_\_\_
  3. GRC Foreign Student Committee: Yes\_\_\_\_ No\_\_\_\_
  4. Campus Religious Groups: Yes\_\_\_\_ No\_\_\_\_
  5. National Groups and their Activities: Yes\_\_\_\_ No\_\_\_\_
  6. Foreign Student Receptions: Yes\_\_\_\_ No\_\_\_\_
  7. Others?(Please list them) \_\_\_\_\_
32. Have you participated in any of the activities mentioned above? Yes\_\_\_\_ No\_\_\_\_
33. Please list the ones in which you have participated \_\_\_\_\_.
34. Do you think that informal parties and activities are more helpful than organized activities in encouraging interaction between foreign and American students? Yes\_\_\_\_ No\_\_\_\_

## Appendix B

November 18, 1963

Dear Foreign Student,

As one of the more than 800 foreign students on our campus you have brought to Indiana the knowledge and customs of your country and culture. We know that you are experiencing new and different customs here in America and we hope that they will help you learn more about us.

In the past, many research studies have concentrated on the experiences and reactions of foreign students in America; but few attempts have been made to appraise the impact and influence of the foreign students on the American students. Therefore, we are requesting your help with a research study.

In the near future you will be asked to give the names of any American students with whom you spend free time, talk with in classes and associate with in the residence halls. The members of the Foreign Student Committee of the Graduate Residence Center and the presidents of the various national students groups will distribute the questionnaires early in January. Your name will not be mentioned as having named any particular person and the American students will not know who has named them as a friend or acquaintance.

We hope that in the next few weeks you will make an effort to learn the names (and correct spelling) of your American friends so that you are able to cooperate with us. This list of names will then enable us to determine the extent of interaction between the foreign students and the American students.

Sincerely,

Robert H. Shaffer  
Dean of Students

Appendix C

INDIANA UNIVERSITY

DIVISION OF STUDENT PERSONNEL

Office of the Dean of Students

Maxwell Hall 205

January, 1964

Dear Foreign Student,

Last November you received a letter explaining the research project which we are conducting to determine the interaction between foreign students and American students. As a part of this study, we would appreciate your completing the accompanying questionnaire.

If you do not intend to enroll for the Spring semester, please bring the completed questionnaire to the Foreign Student Office in Room 205 of Maxwell Hall. If you do plan to enroll for the Spring semester, please return the completed questionnaire to Room 205 of Maxwell Hall or bring it with you to the Foreign Student Desk at Registration.

As a part of the follow-up procedure, when you return the questionnaire in person to Room 205 or at Registration your name will be placed on the list of those students who have completed the questionnaire; but since this information will be primarily used to provide background data for the main study it is not necessary for you to sign your name.

Please write in any additional answers or comments if you think there are not enough responses to adequately express your feelings about any of the questions.

If you have any questions concerning this questionnaire please contact your Foreign Student Representative in GRC, the president of your national group, or call the Foreign Student Office.

We appreciate your cooperation and hope that the results of this study will enable us to improve our Foreign Student Program here at Indiana University.

Sincerely,

Robert H. Shaffer  
Dean of Students

Leo R. Dowling  
Associate Dean of Students

## Appendix D

Interviewer \_\_\_\_\_  
Date \_\_\_\_\_

1. I think it will be easier if you start by thinking of one foreign student that you know fairly well. We don't want his name, but for general identification could you tell me what country he comes from \_\_\_\_\_ and where he lives in Bloomington \_\_\_\_\_. Now, could you give me a brief history of your acquaintance?

(a) How did you first meet him (her)? Write "a" in the appropriate spaces.

___ Class	___ Self-introduction	___ Cosmopolitan Club
___ Lab	___ F.S. introduced himself	___ National Clubs
___ Dept. Seminar	___ Mutual acquaintance	___ YM/YWCA
___ Library	___ Am. S. room/apt.	___ Union
___ In transit	___ F.S. room/apt.	___ Church
___ Abroad	___ Other home(whose?)	___ Private party
___ Accidental	___ Dorm lounge _____	___ Sports area
___ No FS known well	___ Dorm dining room	___ Campus hangout
___ Other _____		

(b) Where do you usually get together? \_\_\_\_\_ Anywhere else?  
Write "b" in check list above.

(c) What interests do you have in common?

___ Academic	___ Church	___ His country
___ Athletic	___ Cultural	___ USA
___ Social	___ People	___ Other countries
___ Other _____		



2. Have you made friends with other F.S.?

☐ Yes ☐ No

Are they from other countries?

☐ Same country ☐ Other countries (same region)

☐ Other regions of the world

3. Did you know any foreign people before you came to I.U.?

☐ Yes ☐ No

Where?

☐ In home community

☐ Travel

☐ Other schools

☐ Overseas residence

☐ Other \_\_\_\_\_

4. Have you conversed with F.S. in any language other than English?

☐ No ☐ A little ☐ F.S.'s language ☐ Other common language(s) \_\_\_\_\_

5. We are also interested in your general opinion of F.S. Since you know some of them (fairly) well, how would you say they differ most from American students?

Mark + if F.S. is more than Am.  
- if F.S. is less than Am.  
0 if F.S. is just different

<input type="checkbox"/> Dress	<input type="checkbox"/> Isolated group	<input type="checkbox"/> Religion	<input type="checkbox"/> Know languages
<input type="checkbox"/> Language	<input type="checkbox"/> Social customs	<input type="checkbox"/> Ethics	<input type="checkbox"/> College Preparation
<input type="checkbox"/> Food	<input type="checkbox"/> Personal habits	<input type="checkbox"/> Maturity	<input type="checkbox"/> Serious students
<input type="checkbox"/> Age	<input type="checkbox"/> Cultured	<input type="checkbox"/> Problems	<input type="checkbox"/> Intellectual interests
<input type="checkbox"/> Shy	<input type="checkbox"/> Money		
<input type="checkbox"/> Other _____			

6. Do you think F.S. really get to know us? (Us=Americans they come in contact with)

☐ Yes ☐ Incompletely ☐ No ☐ Some do, some don't  
☐ Don't know

What do the F.S. think of us?

☐ Like very much      ☐ Like      ☐ Indifferent      ☐ Dislike      ☐ Dislike very much

\_\_\_ Some like, some dislike      \_\_\_ Do not let us know

\_\_\_ Other \_\_\_\_\_

7. Now let's change the subject a bit. How has knowing these F.S. affected you? Have you developed any new interests?

\_\_\_ Language      \_\_\_ Foreign affairs

\_\_\_ Geography      \_\_\_ Government, politics

\_\_\_ Culture      \_\_\_ Economics

\_\_\_ Broadened generally

\_\_\_ Other \_\_\_\_\_

Has it changed your attitudes on any question--at home or abroad?

\_\_\_ Foreigners      \_\_\_ Foreign Culture

\_\_\_ Race      \_\_\_ Foreign countries

\_\_\_ Religion      \_\_\_ Foreign affairs

\_\_\_ U.S. values      \_\_\_ U.S. Policies

\_\_\_ Other \_\_\_\_\_

Have you changed any of your plans for the future?

\_\_\_ Travel      \_\_\_ Courses

\_\_\_ Study abroad      \_\_\_ Learn languages

\_\_\_ Peace Corps      \_\_\_ Vocation

\_\_\_ Other \_\_\_\_\_

8. How do Americans react to American students associating with F.S.?

Friendship

☐☐☐☐☐

Favorably

Indifferently

Unfavorably

Dating

☐☐☐☐☐

Favorably

Indifferently

Unfavorably

Other (specify)

☐☐☐☐☐

Favorably

Indifferently

Unfavorably

Other comments:

9. Do you think the federal government should give financial support to F.S.?

☐☐

Approve

☐

Indifferent

☐☐

Disapprove

Should I.U., a state-supported university, help F.S. financially?

☐☐

Approve

☐

Indifferent

☐☐

Disapprove

10. Now, one last question. Just what do you think of the over-all arrangements for the F.S. here at I.U.?

What kind of difficulties do they have?

What could be done about it?

(Note or underline evidence of misinformation about F.S. Program)

## Appendix E

## Letter to American Students

## DEAN OF STUDENTS OFFICE

Division of Student Personnel

February 1964

Dear Student,

In the past, many research studies have concentrated on the experiences and reactions of foreign students in America; but few attempts have been made to appraise the impact and influence of the foreign student on the American student. Therefore, we are requesting your help with a research study.

During the month of January, all foreign students on campus were asked to name those American students whom they considered to be their friends; you have been named as a friend of a foreign student. Since we are very much interested in learning something about your reaction to and impressions of the foreign students, a member of our staff will contact you by telephone in the near future. If possible, we would like to arrange an appointment to talk with you about the foreign student program on this campus.

Your cooperation will aid us in evaluating our present policies and program here at Indiana University.

Sincerely,

Robert H. Shaffer  
Dean of Students

Leo R. Dowling  
Associate Dean of Students

## Appendix F

## Telephone Introduction Used by Interviewers

"Hello. I am \_\_\_\_\_ from Dean Shaffer's office. I am calling in reference to the letter you received recently concerning our foreign student research study. Since you were named as a friend by a foreign student, I would like to talk with you about your reactions to and impressions of the foreign students. Would it be possible for you to meet with me sometime this week? I will gladly come to your dorm (or apartment), or I could arrange to meet you on campus if it would be more convenient.

(arrange appointment)

Thank you for being so cooperative. Goodbye."



**Appendix G**  
**Reminder Letter**

**DEAN OF STUDENTS OFFICE**

**Division of Student Personnel**

**April, 1964**

**Dear Student,**

**You were interviewed recently by a member of our staff in connection with our Foreign Student Project. At that time you were asked to complete several inventories and return them to us through campus mail. Please disregard this reminder if you have already done so. If you have not, would you please complete the forms and return them to us?**

**If for any reason you are unable to complete these materials, would you please return the blank test packet to us as soon as possible?**

**Sincerely yours,**

**Robert H. Shaffer**  
**Dean of Students**

**Leo R. Dowling**  
**Associate Dean of Students**

## Appendix H

## States Included in Regions of the Country

## I. NORTHEAST

1. Maine
2. Vermont
3. New Hampshire
4. Massachusetts
5. Rhode Island
6. Connecticut
7. New Jersey
8. New York
9. Pennsylvania
10. Delaware
11. Maryland
12. West Virginia
13. District of Columbia

## II. MIDDLE STATES

1. Ohio
2. Indiana
3. Illinois
4. Michigan
5. Wisconsin
6. Minnesota
7. Iowa
8. Missouri

## III. NORTHWEST

1. North Dakota
2. South Dakota
3. Nebraska
4. Kansas
5. Montana
6. Idaho
7. Wyoming
8. Colorado

## IV. SOUTHEAST

1. Virginia
2. North Carolina
3. South Carolina
4. Georgia
5. Florida
6. Alabama
7. Mississippi
8. Louisiana
9. Arkansas
10. Tennessee
11. Kentucky

## V. SOUTHWEST

1. Texas
2. Oklahoma
3. New Mexico
4. Arizona
5. Utah
6. Nevada

## VI. FARWEST

1. Washington
2. Oregon
3. California
- (4) Hawaii (1 student)

## Appendix I

## Fields of Study Grouped Under Major Headings

- |  |   |
|--|---|
| <p><b>I. BEHAVIORAL SCIENCES</b></p> <ol style="list-style-type: none"> <li>1. Psychology</li> <li>2. Sociology</li> </ol> <p><b>II. BIOLOGICAL AND PHYSICAL SCIENCES</b></p> <ol style="list-style-type: none"> <li>1. Anatomy and Physiology</li> <li>2. Bacteriology</li> <li>3. Astronomy</li> <li>4. Biology</li> <li>5. Botany</li> <li>6. Chemistry</li> <li>7. Physics</li> <li>8. Zoology</li> <li>9. Mathematics</li> </ol> <p><b>III. EDUCATION</b></p> <ol style="list-style-type: none"> <li>1. Physical Education, Health and Recreation</li> </ol> <p><b>IV. GOVERNMENT</b></p> <ol style="list-style-type: none"> <li>1. Economics</li> <li>2. Government</li> <li>3. Business</li> </ol> <p><b>V. HISTORY AND RELATED FIELDS</b></p> <ol style="list-style-type: none"> <li>1. Anthropology</li> <li>2. Archaeology</li> <li>3. History</li> <li>4. Fine Arts</li> <li>5. Philosophy</li> <li>6. Geography</li> <li>7. Social Studies</li> <li>8. History and Philosophy of Science</li> <li>9. African Studies</li> <li>10. Asian Studies</li> <li>11. Russian and East European Studies</li> <li>12. Uralic and Altaic Studies</li> </ol> | <p><b>VI. LANGUAGES AND LITERATURE</b></p> <ol style="list-style-type: none"> <li>1. Classical Language and literature</li> <li>2. Comparative Lit.</li> <li>3. East Asian Languages and Literature</li> <li>4. Slavic Lang. &amp; Lit.</li> <li>5. French</li> <li>6. German</li> <li>7. Italian</li> <li>8. Portuguese</li> <li>9. Spanish</li> <li>10. English</li> <li>11. Linguistics</li> <li>12. Folklore</li> </ol> <p><b>VII. MUSIC</b></p> <p><b>VIII. PRE-PROFESSIONAL AND SOCIAL SERVICE FIELDS</b></p> <ol style="list-style-type: none"> <li>1. Law</li> <li>2. Optometry</li> <li>3. Pre-medicine</li> <li>4. Pre-dentistry</li> <li>5. Allied Health Sciences</li> <li>6. Nursing</li> <li>7. Social Service</li> </ol> <p><b>IX. OTHERS</b></p> <ol style="list-style-type: none"> <li>1. Journalism</li> <li>2. Home Economics</li> <li>3. Police Administration</li> <li>4. Speech and Theatre</li> <li>5. Mass Communications and Radio and T.V.</li> <li>6. School of Letters</li> </ol> |
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## Appendix J

## Countries Grouped According to the Areas of the World

I. Africa

1. Congo
2. Ethiopia
3. Guinea
4. Kenya
5. Liberia
6. Nigeria
7. Somalia
8. Southern Rhodesia
9. Sudan
10. Tanganyika
11. U.A.R.
12. Uganda

II. Europe

1. Belgium
2. Denmark
3. England
4. Finland
5. France
6. Germany
7. Greece
8. Italy
9. Netherlands
10. Poland
11. Spain
12. Sweden
13. Switzerland
14. USSR
15. Yugoslavia

III. North America

1. Bermuda
2. Canada

IV. Oceania

1. Australia
2. New Zealand

V. South America

1. Argentina
2. Brazil
3. Chile
4. Colombia
5. Peru
6. Venezuela

VI. Far East

1. Burma
2. China
3. Hong Kong
4. India
5. Indonesia
6. Japan
7. Korea
8. Laos
9. Malaysia
10. Nepal
11. Philippines
12. Ryukyu Islands
13. Thailand

VII. Near and Middle East

1. Afganistan
2. Cyprus
3. Iran
4. Iraq
5. Israel
6. Jordan
7. Kuwait
8. Lebanon
9. Pakistan
10. Saudi Arabia
11. Syria
12. Turkey
13. Yemen

VIII. Latin America

1. British West Indies
2. Costa Rica
3. Cuba
4. El Salvador
5. Haiti
6. Jamaica
7. Mexico
8. Panama
9. Puerto Rica

## Appendix K

## Analysis of Variance Tables

**TABLE 123. F RATIOS WHICH WERE NOT SIGNIFICANT ON THE VARIABLES OF THE EDWARDS PERSONAL PREFERENCE SCHEDULE FOR MALE STUDENTS IN THE NAMED AND NOT NAMED POPULATIONS**

Variable	Source of Variation	DF	Mean Square	F Ratio
Achievement	Between groups	1	32.819	1.583*
	Within groups	140	20.664	
Deference	Between groups	1	3.908	0.262*
	Within groups	140	14.891	
Order	Between groups	1	30.056	1.545*
	Within groups	140	19.448	
Exhibition	Between groups	1	22.606	1.690*
	Within groups	140	13.371	
Autonomy	Between groups	1	4.782	0.241*
	Within groups	140	19.816	
Affiliation	Between groups	1	19.302	1.106*
	Within groups	140	17.438	
Intracception	Between groups	1	7.971	0.304*
	Within groups	140	26.213	
Succerance	Between groups	1	1.182	0.045*
	Within groups	140	26.188	
Dominance	Between groups	1	31.196	1.141*
	Within groups	140	27.328	

\*Not Significant at the .05 level of confidence.

Table 123 (Continued)

Variable	Source of Variation	DF	Mean Square	F Ratio
Abasement	Between groups	1	14.849	0.555*
	Within groups	140	26.715	
Change	Between groups	1	2.324	0.094*
	Within groups	140	24.692	
Endurance	Between groups	1	1.135	0.044*
	Within groups	140	25.704	
Heterosex- uality	Between groups	1	0.972	0.025*
	Within groups	140	37.469	
Aggression	Between groups	1	3.104	0.165*
	Within groups	140	18.709	

\*Not significant at the .05 level of confidence.



**TABLE 124. F RATIOS WHICH WERE NOT SIGNIFICANT ON THE VARIABLES OF THE EDWARDS PERSONAL PREFERENCE SCHEDULE FOR THE FEMALES IN THE NAMED AND NOT NAMED POPULATIONS**

Variable	Source of Variation	DF	Mean Square	F Ratio
Achievement	Between groups Within groups	1 160	15.241 19.578	0.778*
Deference	Between groups Within groups	1 160	0.059 13.310	0.004*
Order	Between groups Within groups	1 160	47.107 24.458	1.926*
Exhibition	Between groups Within groups	1 160	1.377 13.229	0.104*
Affiliation	Between groups Within groups	1 160	2.732 17.241	0.158*
Intracception	Between groups Within groups	1 160	29.025 22.937	1.265*
Succorance	Between groups Within groups	1 160	84.695 25.705	3.294*
Dominance	Between groups Within groups	1 160	50.720 21.143	2.398*
Abasement	Between groups Within groups	1 160	19.477 26.068	0.747*
Nurturance	Between groups Within groups	1 160	1.447 20.339	0.071*

\* Not significant at the .05 level of confidence.

Table 124 (Continued)

Variable	Source of Variation	DF	Mean Square	F Ratio
Change	Between groups	1	1.447	0.071*
	Within groups	160	20.339	
Endurance	Between groups	1	83.477	3.490*
	Within groups	160	23.917	
Aggression	Between groups	1	18.322	0.942*
	Within groups	160	19.431	

\*Not significant at the .05 level of confidence.

**TABLE 125. F RATIOS WHICH WERE NOT SIGNIFICANT ON THE SCALES OF THE STUDY OF VALUES FOR THE MALES IN THE NAMED AND NOT NAMED POPULATIONS**

<b>Variables</b>	<b>Source of Variation</b>	<b>DF</b>	<b>Mean Square</b>	<b>F Ratio</b>
<b>Theoretical</b>	<b>Between groups</b>	<b>1</b>	<b>18.710</b>	<b>0.281*</b>
	<b>Within groups</b>	<b>139</b>	<b>66.432</b>	
<b>Aesthetic</b>	<b>Between groups</b>	<b>1</b>	<b>401.005</b>	<b>3.92*</b>
	<b>Within groups</b>	<b>139</b>	<b>102.116</b>	
<b>Social</b>	<b>Between groups</b>	<b>1</b>	<b>81.702</b>	<b>1.397*</b>
	<b>Within groups</b>	<b>139</b>	<b>58.481</b>	
<b>Religious</b>	<b>Between groups</b>	<b>1</b>	<b>227.305</b>	<b>1.871*</b>
	<b>Within groups</b>	<b>139</b>	<b>121.447</b>	

\* Not significant at the .05 level of confidence.

**TABLE 126. F RATIOS WHICH WERE NOT SIGNIFICANT ON THE SCALES OF THE STUDY OF VALUES FOR THE FEMALES IN THE NAMED AND NOT NAMED POPULATIONS**

Variable	Source of Variation	DF	Mean Square	F Ratio
Economic	Between groups	1	181.943	2.614*
	Within groups	101	69.592	
Aesthetic	Between groups	1	228.334	2.466*
	Within groups	101	92.562	
Social	Between groups	1	19.455	0.490*
	Within groups	101	39.662	
Religious	Between groups	1	117.179	1.234*
	Within groups	101	94.925	

\* Not significant at the .05 level of confidence.